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City of Cambridge.

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THE

MAYOR'S ADDRESS

AT THE

Organization of the City Government,

AND THE

ANNUAL REPORTS

MADE TO

THE CITY COUNCIL.

CAMBRIDGE:
TRIBUNE PUBLISHING COMPANY.
1883.

PUBLISHED BY ORDER OF THE CITY COUNCIL.

THE MAYOR'S ADDRESS.

Gentlemen of the City Council: —

In commencing our official duties for another municipal term it is becoming, especially as the representatives of our fellow-citizens, that we should look to a Higher Power, to Him who controls the destinies of communities, as well as of men individually, to thank Him publicly for his protecting care, which has given to our people so great a degree of health and prosperity, and to implore His continued guidance for the coming year.

In accordance with the provisions of our charter, it devolves upon me to give you such information as I may possess of the state of the several departments of our city government, over which you will now assume control, and to direct your attention to the most important and requisite matters that will necessarily be brought before you for consideration.

But let me first return my thanks to my fellow-citizens for the unusual degree of confidence so kindly reposed in me by an election to the mayoralty for the third time, and to express my earnest and sincere intention to merit their approbation by a faithful discharge of every duty on my part.

It is a matter of great congratulation that the questions of ordinary partisan politics do not enter into our municipal canvasses and elections; there are few other cities in this Commonwealth, or in New England even, so highly favored in this regard. There is another respect in which we are fortunate: I allude to our policy relative to a practical and reliable form of civil service. The imminent danger to our institutions from the policy that "to the victors belong the spoils," involving as it does at every partisan change almost an entire change in the principal or minor officials, it gives me pleasure to state does not exist among us.

Cambridge has a well-working system of government, based on business principles, devoted to a proper economy in expenses, and where every official is justly continued in office so long as he devotes himself to the strict performance of the duties of his position.

NECROLOGY.

It is sad to note that our city has suffered the removal by death of several worthy and prominent citizens, whose service in several ways in our behalf has been valuable and noteworthy. Our first mayor, Mr. James D. Green, who served us ably for more than four years, has passed away. He was an upright chief magistrate, of unflagging fidelity, and fitly did his part in setting forward our city under an enlarged form of government, and on the career of prosperity it has since enjoyed; and he lived to a late day, respected by all.

It is no invidious comparison to say that our most

distinguished citizen was the late Henry Wadsworth Longfellow, whose fame has gone forth to the world's end, as a bard of pure and elevated verse, whose name has become a household word in so many happy homes, and who has cheered the sorrowful or lowly by the comforting poems he has sung.

Last and youngest in this necrology was Dr. Obed C. Turner, the faithful physician to the poor of the city, who died at his post of a disease contracted in the direct discharge of his duty as a city physician. He was a faithful public servant to those in humble life, ever active and earnest in his labors for their relief; and, for these estimable traits of the "beloved physician," all praise is justly due.

Several other prominent and useful citizens have also passed away during the year, whose familiar forms we shall miss and whose example and whose labors have left an abiding impress on this community.

LONGFELLOW MEMORIAL ASSOCIATION.

It is a gratifying fact that an association has been incorporated, and is now in active operation, for the purpose of providing a suitable memorial of our late distinguished poet and honored citizen. The purpose is to acquire the beautiful parcel of land situated opposite his late residence, and which Mr. Longfellow fortunately preserved from the encroachments of the growing city, in order to secure from his windows an uninterrupted view of the river Charles and the hills beyond.

An ulterior object is also to obtain "the historic mansion" itself which is hallowed as the headquarters, for a time, of the immortal Washington, and as the home for many years of the loved poet. Should these projects be attained, a portrait statue of the bard will be erected and other embellishments added, which will render our city an attractive place, well worthy of visitation by all lovers of the two illustrious occupants of the mansion.

The City Council has granted the use of apartments in the public building on Brattle Square for the Memorial Association, and I would here commend the objects of that organization to the liberality of our citizens and the fostering care of the municipality.

FISCAL.

The settled financial policy of the city has been strictly adhered to and found to work admirably, as usual, yet it has required all the wisdom and the most scrupulous care which the City Council could possibly bring to the work to sustain it successfully.

Let me now call your attention to several causes which, operating together, have militated against an even more favorable showing, such as would otherwise have been made at this time.

Owing to the operation of the recently enacted statute relative to the taxation of mortgages, a reduction of nearly a million of dollars had to be made in the valuation of personal property.

The state tax for the past year was upwards of $17,000 greater than that of the year 1881. Then, too,

the condition of our streets, bridges, and sewers, occasioned by the strict economical course pursued for the five previous years, was so much impaired that an unusual expenditure was imperatively demanded last year, and the consequent excess over the usual amount, for these long-needed repairs, was nearly $30,000.

Again, during some previous years, the bills accruing in the month of November have been put over to the month of December instead of being kept in the proper year's account. The financial year commences on the first day of December of each year, and ends on the thirtieth day of November of the next year. Now, for the first time in many years, the November bills (really a thirteenth month), amounting to $56,988, have been paid and entered in the account of the last year and the books closed for 1882. These bills have heretofore been charged at the beginning of the new financial year, but hereafter they will be entered of record at the close of the year, and will show the proper receipts and expenditures for the correct financial year ending on the 30th of November.

Notwithstanding all these drawbacks, the tax was retained at a rate nearly the same as those of the two preceding years, being at an advance only of sixty cents upon a thousand dollars.

Our complete fiscal condition on Nov. 30, 1882, as the books of the City Treasurer and Auditor show, was as follows, viz.: —

RECEIPTS AND EXPENDITURES.

Cash on hand, Nov. 30, 1881	$3,285 15
Cash received from all other sources to Nov. 30, 1882, inclusive	1,945,850 01
Total receipts for the year	$1,949.135 16
Total expenditures for the year	1,943,736 07
Cash balance, Nov. 30, 1882	$5,399 09

The appropriations for 1882 were as follows:—

To be raised by taxation	$975,678 78
Estimated revenue	264,917 07
Excess of estimated revenue used	48 28
	$1,240,644 13

LIABILITIES (OTHER THAN THE FUNDED DEBT).

State tax	$69,540 00
County tax	26,208 53
National Bank tax non-residents	5,838 40
Corporation tax	31 83
The Dowse Institute trust fund	10,000 00
The Sanders Temperance trust fund	10,000 00
The Daniel White Charity trust fund	5,000 00
The Fay library trust fund	1,000 00
The Cemetery fund for perpetual care of lots	4,400 00
Temporary loan	100,000 00
	$232,018 76

ASSETS.

Cash in treasury	$5,399 09
Bills receivable, secured by mortgage on real estate	23,762 50
Due from Commonwealth (State aid to soldiers)	14,892 00
Due from Commonwealth for support and burial of paupers	193 67
Due from Commonwealth corporation tax	48,208 75
Due from Commonwealth for National Bank tax	20,489 41
Surrendered estates and salable city lands (estimated)	212,876 83
Uncollected water bills	1,149 59
Uncollected taxes of 1881 and 1882	77,048 09
Miscellaneous bills	2,619 30
Total	$406,639 23

FUNDED CITY DEBT.

Bonds outstanding	$3,055,000 00
Sinking Fund	1,491,512 45
Net city debt	$1,563,487 55

FUNDED WATER DEBT.

Bonds outstanding	$1,478,700 00
Sinking Fund	483,137 81
Net water debt	$995,562 19

THE FUNDED DEBT COMPARED.

The amount of the city and water debt, Nov. 30, 1882, as compared with the same debt, Nov. 30, 1881, is as follows, viz.: —

	1881.	1882.
Gross funded debt	$4,632,500 00	$4,533,700 00
Less amount in both sinking funds	1,784,022 18	1,974,650 26
Net gross debt	$2,848,477 82	$2,559,049 74
Decrease of gross funded debt Nov. 30, 1882		$289,428 08

Although the sinking fund for the extinguishment of the city debt has assumed large proportions (amounting to almost $1,500,000), yet I trust that it has reached its highest point, and that no long bonds shall be hereafter issued so as to necessitate any great appropiation for such a purpose in the future.

During this and the next year we pay of our bonded debt over one and a quarter millions of dollars.

The sinking fund of the water works now amounts to about half a million dollars, and from the nature of the debt (especially if the expense of an additional water supply should be entered upon) must necessarily increase. This fund is in charge of three trustees com-

posed of elective city officials, viz., the Mayor, the City Treasurer, and the President of the Common Council, all of whom may by the chances of an election be displaced in any one year, and three entirely new and inexperienced men succeed to the important charge. Can there be doubt in the mind of any one that this increasing fund should be in the custody of a more permanent board? I would recommend such a change in the law as shall place this fund, together with the six trust funds of a benevolent nature, now in the care of as many different boards of trustees, in the custody of the Commissioners of the Sinking Funds of the city of Cambridge, composed as it is of trusted citizens elected for long terms of service and only going out of office alternately, two in each year.

TAXATION.

The total valuation of estates both real and personal, as given by the Board of Assessors the past year, was $50,668,280. The same valuation in 1881 was $51,093,-290, thus showing a decrease from that year of $425,-010, which is accounted for, as I have explained, by the change in the law relating to mortgages. I would renew my recommendation of last year that a competent secretary of the Board of Assessors be appointed, a man of business experience, who may be constantly on duty at the office to answer calls of citizens for information, and to assist the assessors in their responsible duties. Some decided improvements have been adopted by the board during the last year, yet I would recom-

mend a more equitable division of the labors of the assessors, by making a nearly equal division of the territory of the city into three assessorial districts, so as to equalize their duties the better, and enable them to transact the important duties incumbent upon them in a more efficient manner.

OUR PUBLIC SCHOOLS.

Too much importance cannot be attached to our admirable school system, as it is the foundation of the principal education which the great mass of our population ever receives. The same high rank of educational attainment that has always characterized our city has been maintained. Though the report of the School Committee is not as yet prepared, I have received the following statistics from the faithful superintendent of schools, Mr. Francis Cogswell: —

SCHOOL STATISTICS FOR 1882.

Number of pupils, December, 1882	8,617
Increase during the year	448
Number of teachers	200
Increase during the year	8
Cost of the schools, not including expenditures for new school-houses and alterations	$166,230 52
Increase over last year	7,947 68
Cost of the schools per pupil	21 04
Decrease from last year, per pupil	25
Cost of school-house in Ward Four, with furniture	12,079 73
Cost of evening drawing school	700 00
Total expenditures for all school purposes	179,010 25
Deducting receipts from the Hopkins Fund ($783.96), and from tuition of non-resident pupils ($226.75), actual cost of the schools to the city in round numbers	178,000 00
Increase over last year	11,232 16

A new school-house has been erected in Ward Four during the past year, situated on Howard and Grigg Streets, near Western Avenue. It has been furnished in a substantial manner, and is every way worthy of the city. The school has been denominated the Tarbell School, in memory of the late Miss Mary A. Tarbell, who for many years was a faithful and much respected instructor in our schools. Additional accommodations are now needed in Ward Three, and also near the boundary line of Wards One and Four.

Another year's experience and a careful examination of the question have confirmed me in the opinion suggested in my last annual address, that it would be desirable to place the janitors of the several school buildings under the immediate direction of the School Committee, who have so much better opportunities for guarding against a waste of fuel and neglect to keep the buildings properly clean, and who can in every way better promote the sanitary condition of the school-houses than the Committee on Public Property.

THE PUBLIC LIBRARY.

From the twenty-fifth annual report of the Trustees of the Public Library, you may learn the items of interest relative to this portion of our educational system. Of the annual appropriation, not more than one fourth is available for the purchase of books, the other three fourths being required for the payment of rent, salaries, and other current expenses. Eleven hundred and eighteen books were purchased during the year, of which seven hundred and ninety-four were new, and

three hundred and twenty-four were to replace old ones which had become unfit for use by wear.

Total issue of books for the year 1881	82,850
Total issue of books for the year 1882	78,934
Decrease	3,916
Number of books in library, Nov. 30, 1881	13,770
Number of books in library, Nov. 30, 1882	14,564
Number of citizens using the library	9,344

I would bring to your notice the fact that the library has outgrown its present quarters. The valuable books of reference which it contains cannot be used to advantage, for the reason that the rooms are too circumscribed, and not free from noise and confusion unavoidably attendant upon the delivery and return of books. There is also danger from fire, which might destroy our complete collection, much of which we should be unable to replace. A larger, more safe, and special building for the purpose is now greatly needed. Cambridge, the second city in the State in point of wealth, is signally behind many towns and smaller cities in this regard. Newton, Brookline, Concord, Woburn, Belmont, and Lexington have each fine library buildings, the gifts, in whole or in part, of liberal and public minded citizens; and are there not such among us who, learning our needs, would be willing to contribute of their wealth for the accomplishment of so desirable a purpose?

There are many other matters of interest to which I cannot now allude, but to the admirably drawn and especially interesting report in full of the Trustees, I direct your attention.

HARVARD UNIVERSITY.

The relations of the city to our existing University are, as usual, extremely pleasant; and, while we have endeavored to extend to it all the advantages in our power, the favor is duly reciprocated in several ways. It is noteworthy also that though a large number of students in all departments (rising one thousand) are resident among us for the principal portion of the time, yet the relations of "town and gown" are singularly agreeable. The students are a gentlemanly and refined body of young men, aiding us in sustaining a well-ordered community, which, for a university city, is a fact quite remarkable.

THE WATER WORKS.

From the eighteenth annual report of the Water Board, together with those of the registrar, superintendent and engineer, full particulars may be obtained of the exact state of this important interest. The total cost of the system to Nov. 30, 1882, was $1,745,614.47, of which $16,959.12 were expended the last year.

Amount of receipts from water rates	$177,430 80
Amount of receipts from other sources	5,023 01
Total	$182,453 81

The amount of water distributed at the works for the past year was 903,234,909 gallons, making a daily average of 2,474,616 gallons, and to each inhabitant of 44.19 gallons, based upon an estimate of a population of

56,000. A deduction from the amount above stated of the quantity sold by meter or used in watering the streets, viz., 233,497,905 gallons, would reduce the daily average for each inhabitant for domestic purposes to about 32.76 gallons. This is an improvement over our excellent record of 1881. The daily average of consumption of water in forty-seven other cities of our country, from the reports thereof, shows that in only two cities (Lowell and St. Louis) is the ratio the same, while in one only (Cleveland, Ohio) is it less. This favorable result is attributed to the constant care which has been observed by the superintendent to prevent leakages in the pipes or waste by consumers; and it also shows that we have perhaps reached the practicable minimum of consumption.

The extension of the high-service supply to residents on Cambridge heights has been carried out during the year very satisfactorily. This service is done by raising the water by a small but special pump, separate from the general system of pumping for the rest of the city, so that the water used by the residents on that elevated locality is now constantly supplied to them, but without the unnecessary expense of raising the water for the entire city to the top of the stand-pipe. As it is the part of a wise foresight reasonably to provide for the future, I would state that a renewed application will be made at the ensuing session of the Legislature to secure the right to take water from the Shawsheen River, in case it should ever become necessary for us to have such an additional supply.

STREETS.

An important interest, involving a large expenditure for annual repairs and a varying amount for the opening of new avenues from time to time, is embraced in the street department. The condition of the streets is generally good. Eighteen new streets have been accepted, and are now public ways. The question of paving Main Street by sections is one that may come up for consideration the present year, and it will be for you to decide whether the time has actually arrived to commence that costly undertaking, which must come at some time in the near future. Prison Point Street has been substantially paved, thus making a much-needed and long-called-for improvement. The causeway leading to Brookline Bridge is now completed, and will afford a convenient and handsome approach to our city of a uniform width of fifty feet. One evidence of the generally safe condition of our streets is evinced by the fact that a reduced amount of damages for personal injuries from defective highways has been recovered from the city during the year.

I would renew my recommendation, made two years ago, as to the great need still existing for the marking of many streets, and portions of prominent streets, as yet unmarked by any street sign whatever.

STREET LAMPS.

The number of street lamps in the city is eight hundred and sixty-two, an increase of fifteen since the last report. As the lamps are still lighted with reference to

the age of the moon, complaints continue to be made of the darkness of the streets when the sky is overcast by clouds. The only remedy, in my judgment, is that recommended by the superintendent, "to light the lamps at sunset and to burn them all night. We should then have a certainty that, under all changes of weather, the streets would be well lighted and safe for travelling, should have a safeguard against burglary and accidents, — which are more liable to occur under the present system, — and should satisfy the expressed desire of the citizens for more light." Your attention is especially called to the condition of Brattle Street, from Lake View Avenue to the old Belmont line, a distance of nearly half a mile entirely destitute of street lamps; also to a district in Ward Five, being about two thirds of the entire ward, and but partially provided with lighting apparatus.

STREET RAILWAYS.

There are now two street railway corporations in active operation, occupying in part some of the avenues of our city, and, during the coming year, both of them may come before you asking from time to time some further locations and privileges. While bearing uppermost in mind the convenience of the public, which would warrant you in granting to either of them any reasonable request that they may make, yet I trust that the interests of both may be strictly guarded, and that no infringement upon the rights of either may be allowed. The streets are for the benefit of the whole public, and no unfair discrimination should ever be

made against the proper privileges of all the people, or of any corporation acting for the benefit of any portion of it, to enjoy the use of the public ways in every reasonable manner.

BRIDGES.

The several bridges or portions of bridges which are legally maintainable by the city are declared by the commissioners and our city engineer to be in a sound condition. By a recent decision of the Supreme Court, the maintenance of the bridge on North Avenue over the Fitchburg Railroad devolves upon that corporation and not the city, and I have accordingly given the proper notice to that effect to the Fitchburg Railroad Company.

The repairs on Brookline Bridge have been carried out at an expense of about $4,000 in round numbers.

From the intelligent report of Dr. Parmenter, the esteemed commissioner on the part of Cambridge, you will learn the full particulars of the state of the West Boston, Canal, and Prison Point Bridges, and to this I invite your careful attention.

Situated as we are, so greatly surrounded by the waters of Charles River, which forms a natural barrier to our ready egress from town by ordinary roads, this interest is important and unavoidable and should be met as a necessity cheerfully and readily.

THE NEW BRIDGE.

By authority granted by the last Legislature, the cities of Cambridge and Boston are authorized to build a new bridge across the Charles River on a line from

Front Street extended, to West Chester Park on the Boston side. Conference has been had with a committee of the city government of Boston, and the matter has by mutual agreement been left to the engineers of the two municipalities to make soundings and borings for the location of the supporting piers and to prepare plans for the superstructure. We have made an appropriation of $1,000, for the purpose of carrying out the above-mentioned objects, and our neighboring metropolis has taken steps toward a similar action, the consummation of which we now await.

CHARLES RIVER EMBANKMENT.

The corporation now fully organized for the purpose of extensive improvements along the Cambridge side of the Charles River, between West Boston and Brookline Bridges, has now reached a period when it becomes necessary to commence the great work by building, as it fully proposes to do, a thousand feet of the retaining sea-wall, and at a point which shall form the Cambridge abutment of the new bridge. It also proposes to fill in between that wall and the Grand Junction Railroad a considerable area of flats, according to the provisions of its acts of incorporation. That company applied to our last administration for some favor in the way of exemption from increased taxation over present valuation, for a term of years, and for this they offer in return a filled roadway, seventy-five feet in width, from the Grand Junction Railroad to the projected bridge. This proposition

seems to me most reasonable, and as it is favorably commended to you by the committee of the last city government having the matter in charge, I hope that you will receive it in the same spirit in which it has been referred to you, as one of gigantic financial proportions, and fraught with immense benefit to our city in case it is carried out successfully.

OUR PUBLIC GROUNDS.

The condition of our common and various public squares, which will soon be placed in charge of your Committee on Roads and Bridges, is excellent. The trees in the squares and along the streets are thriving, and should receive fostering care, for shady avenues and parks add much to the beauty of a city like our own. You are all doubtless aware that in the very centre of Cambridge there is a lovely grove, large in extent, diversified in grade, and attractive in forestry. I allude to the grounds of Prof. Charles E. Norton. It is understood to be his desire to make some arrangement with the city whereby its people may have the use of this delightful place for purposes of health and recreation. Such an opportunity to secure its use, even temporarily, should not be overlooked.

In the month of November last, a former citizen, Mr. Samuel J. Bridge, acting conjointly with the city, generously set up a statue in bronze of his ancestor, John Bridge, the Puritan, on Cambridge Common. The occasion was a most pleasant one every way. The proseedings will be published with the usual city documnet.

SEWERS.

The length of sewers constructed the past year was 8,066 feet, at a cost of $20,447, making a total length of sewers in the city of $64\frac{884}{1000}$ miles. In the Engineer's report will be found a detailed statement of this important work, together with the interesting account of repairs on the Bridge Street and Binney Street sewers and the cleaning of the same by a machine the same in principle as those used in the sewers of the city of Paris. The most satisfactory account given by the engineer of the other sewer work of the year, together with his valuable suggestions, is well worthy your attention.

THE POLICE DEPARTMENT.

From the annual report of the Chief of Police, you will see the record of the working of this department, the number and causes of arrest, number of lodgers not criminal in the station houses, the value of property stolen and recovered, the amount of city property in use by the police force, with the cost and receipts of the department, for thirteen months. It was deemed best in October last to make an addition of seven men to the force, making the present maximum number sixty-seven officers and men. The record of sickness is remarkably high, as nearly six hundred days' absence from duty is reported among all the men. One death has occurred, that of Mr. Otis Dennison, of the second district, known to me as a most faithful officer and worthy man. Happily but few cases of

aggravated felony have been committed, yet, on the 14th of October last, Mr. Charles S. Childs, an employé of the city, was assaulted in a serious and almost fatal manner, and robbed of funds belonging to the city. The police were active in ferreting out those whom they believe to be the assailants, and they have accordingly been arrested, indicted, and now await trial.

THE FIRE DEPARTMENT.

The Chief Engineer presents a very minute report of the work done in the Fire Department the past year, the state of the extinguishing apparatus, the number of alarms, the loss of property, and accidents sustained at fires, and other interesting information. He calls special attention to the state of the fire-alarm telegraph, with its eighty-six miles of wire, etc., and states that some additional and modern improvements ought to be made in order to secure prompt alarms and prevent a large possible loss from the failure to get the same in season by an accidental breaking of the wire. Since the alarm system was put in operation, in 1869, many valuable improvements have been made which it would be in the line of a wise economy to adopt, especially that of a new automatic repeater. I would direct your attention to the several suggestions of the Chief Engineer relative to this matter, the purchase of new hose and some younger horses.

THE NEW HOSPITAL.

It is a source of much gratification to me to state that, after years of earnest effort, the trustees of the proposed new hospital for this city have at length made a definite

commencement of their undertaking, by the purchase of a large and desirable lot of land fronting on the western side of Mt. Auburn Street, and running back to the Charles River. It is a high, dry, and every way suitable location for the purpose; and now it is hoped that the work of erecting a building which shall be creditable to this community will go on to an early completion, the necessity of which, in a city of the size and importance of Cambridge, cannot be gainsaid. I would bespeak for this deserving project a continued interest on the part of our citizens generally; and when the time shall come the municipal government, doubtless, will bear its share in the proper maintenance of so beneficent and needful an institution.

ALMSHOUSE AND THE POOR.

The usual wise system of distribution of relief to the deserving poor of our city is working remarkably well, the net cost of which for the year 1882 was $25,276.47, being less than that of the previous year by $560.94. The commendation from the State Board of Charities relative to the general working of our system of aid to the poor, and particularly as to the management of our almshouse, is, in my judgment, justly awarded.

At no other public institution in the State of the same character are the unfortunate poor better cared for or more kindly treated. A regular monthly visitation to the almshouse during the past two years, mingling with the inmates, and interrogating them as to their situation and needs, has convinced me that the

opinion of the State officials above mentioned is well deserved. Much credit is due to the efficient warden for his successful management.

THE CAMBRIDGE CEMETERY.

It is the duty of a right-minded community to take a proper interest in the burial-places for their dead; and when those places are not only carefully preserved, in point of sanitary regulations, but are also adorned with such natural or artistic embellishments as are now employed, they become delightful and attractive for the living to visit. The Commissioners of Cambridge Cemetery are exercising their usual fidelity in the care of our "garden of the dead," and a continued system of improvement and development is going on.

The whole number of interments made since its establishment, in 1854, is 12,502, of which 566 have been made the past year. The time has now come when some provision should be made for an extension of the cemetery by the purchase of more land, negotiations for which have already been made, but nothing definite is as yet arrived at.

Gentlemen of the City Council: —

In this cursory survey of the general working of our government, I have been unable to dwell with as much particularity as I might otherwise have done, and therefore I have only offered to you such a general abstract of the situation of Cambridge as a municipality as my time would allow, with such thoughts in

passing as seemed to me proper; consequently, I must suggest to you individually that, in order to discharge your duties more acceptably, you should make yourselves familiar with the full particulars of the several department reports (many of which I have been unable even to mention), and especially those of the department to whose care you may each be called by your appointment upon the committees of the City Council. They are all carefully prepared, most of them with special intelligence, minuteness, and ability, and the several heads of departments merit our hearty approbation.

In the financial *exposé* that I have made, it is clearly shown that we have been suffering under a burden of debt for a protracted period. For eight long years the taxes have ranged from $16 to $18 on a thousand. Now, if large projects or costly improvements had been in course of development, such high tax rates would have been a natural consequence ; but when the fact is recognized that for the last six years we have lived upon the merest pittance, as to purely municipal expenditures, and that nearly a half of the whole amount raised by taxation was expended for current interest, and for the statute requirements for the sinking fund for the extinguishment of the general city debt, can there be any doubt as to the policy of the non-issue of any more long-time running bonds, or as to the adoption of the principle of settling for each improvement substantially as we go along, or, in other words, " to pay as we go "?

By such a policy a close economy will be required, and I seriously adjure you, during this last year of

special retrenchment, the most difficult of all to bear, to adhere with great strictness to an expenditure only sufficing for our actual needs, resisting with scrupulous watchfulness the promptings for any lavish municipal expenditure.

With such a policy in our minds, let us now address ourselves to our several duties, hoping and trusting that by our best efforts practically to carry it out, we shall insure to our citizens and to ourselves, a Happy New Year.

JAMES A. FOX.

REPORT

OF THE

COMMITTEE ON FINANCE.

The final exhibit of the city finances for the year 1882 shows a considerable increase in the expenditures over those of the previous year. As the City Council of 1881 had authorized the construction of an additional school-house in Ward Four, this item, with the prospect of larger demands for improvements and repairs in other directions than had before been made, early rendered it apparent to your committee that a corresponding increase would be necessary in many of the appropriations. Every reasonable endeavor was nevertheless made to reduce the figures to a low point. The footings upon the debit and credit side of the Treasurer's accounts, as given in the annual reports heretofore made, having differed in respect to the *months* composing the financial year, it was thought proper by this committee to bring about a correction of this difference, so that hereafter the figures on each side shall represent the cash transactions of the city for the true financial year, extending from Dec. 1 to Nov. 30, inclusive. In the reports of former years, the receipts named are for the months included above, while the payments are for the months from Nov. 1 to Oct. 30, inclusive. As the financial year for expenditures began with the month of November, 1881, the correction of the difference hereinbefore named required the addition of the month of November, 1882, to the financial year, thus including thirteen months, and rendering it necessary that the appropriations for the year should be re-enforced by the addition of a sum equal to the amount of the November bills. These bills being payable Dec. 10, have heretofore been charged at the beginning of the financial year; hereafter they will be entered at the close

of the year, and will correctly show the receipts and expenditures to Nov. 30, inclusive.

The expenditures from the city treasury in the years named hereunder, chargeable to appropriation accounts, were as follows: —

Nov. 1, 1881, to Dec. 1, 1882, 13 months .	$1,232,561 82
Nov. 1, 1880, to Nov. 1, 1881, 12 months . .	1,143,594 53
Excess in 1882 over previous year . . .	$88,967 29
Deduct amount of November bills	56,988 78
Actual increase in 12 months	$31,978 51

The appropriations which have been subject to the largest increase in the usual twelve months, over the amount reported in the year 1881, are the following: —

Excess of expenditure over previous year:	
Bridges, part of cost of repairing Brookline Bridge	$3,243 91
Lighting streets, part of cost of maintaining additional lamps and of extending the time of keeping the street lamps lighted	1,751 65
Pauper Department, almshouse, increase . .	4,742 94
School-houses, care and repair, part of increased cost of new school-house over that built in 1881	4,884 62
Sewers, construction and maintenance, part of cost of increased number of sewers built, and repairs upon old work	13,347 39
Street Department, paving, part of cost of increased amount of brick paving	3,632 21
Street Department, repairs, part of increased cost of repairs upon streets	5,150 12
Street Department, watering, part of cost of greater number of streets watered. . . .	3,902 74
Total	$40,655 58

All the above-enumerated expenditures having been made under the direction of competent boards and committees, no justification thereof is required at the hands of this committee.

The amount borrowed on temporary loans was : —

In 1882	$625,000
In 1881	575,000
Increase in 1882	$50,000

Of the total sum borrowed as above stated there was paid from the taxes of 1882 the sum of . . .	$525,000
Amount unpaid and payable from the taxes of 1883,	100,000
Total	$625,000

Included in the above was the sum of $46,000, which was paid to the Commissioners of the Sinking Funds, in anticipation of the November indebtedness to that board. Upon the money thus advanced there was an accrued interest due to the city treasury to Nov. 30, unpaid at that date.

The amount paid for interest upon the temporary loan of $525,000 was	$9,720 05
Interest so paid in 1881	9,933 48
Decrease in 1882	$213 43

The additional loan to the treasury of $100,000, payable in 1883, was rendered necessary by the increased expenditure for the twelve months ending Oct. 31, 1882, an account of which has hereinbefore been given, and by the addition of the amount of the November bills to this financial year. An extra appropriation, equal to the amount of these bills, was made by the City Council.

The balance of cash on hand, per Auditor's account, was : —

In 1882	$5,399 09
In 1881	3,285 15
Increase	$2,113 94

As the amount above given for the year 1882 represents the state of the treasury with the amount of the November bills deducted, the same not being payable until Dec. 10, it follows that the actual amount of funds in the Treasurer's hands was as hereunder : —

Balance per Auditor's account	$5,399 09
Amount of November bills	56,988 78
Unpaid City Loan Bond (overdue)	1,000 00
Actual amount of cash on hand	$63,387 87

A meeting of the committee was held at the Treasurer's office at the close of business, Nov. 30, and a careful examination was made of the cash on hand, the result being a verification of the figures given above, the same being in accordance with the accounts of the Auditor.

A subsequent meeting was held in the month of December, and a careful comparison made of the Treasurer's accounts with those of the Auditor, and with the Assessors' warrants. The various footings were examined and verified, in the manner described in the city document for 1879, pages 26 and 27. All the accounts were proved to be correct, and agreeing with those of the Auditor.

Below may be found the usual tables drawn from the Assessors' books.

Polls and Valuation of Estates in 1882.

Wards.	Polls.	Personal.	Real Estate.	Total.	Dwellings.
Ward 1 . .	2,387	$4,982,050	$10,179,000	$15,161,050	1,616
" 2 . .	3,851	3,117,630	10,159,600	13,277,230	2,322
" 3 . .	2,837	1,374,800	6,471,100	7,845,900	1,381
" 4 . .	3,316	1,377,100	7,563,300	8,940,400	2,223
" 5 . .	1,501	725,500	4,718,200	5,443,700	947
Total,	13,922	$11.577,080	$39,091,200	$50,668,280	8,489

Polls and Valuation of Estates in 1881 (Corrected).

Wards.	Polls.	Personal.	Real Estate.	Total.	Dwellings.
Ward 1 . .	2,363	$5,077,950	$10,037,200	$15,115,150	1,604
" 2 . .	3,849	3,456,555	9,995,700	13,452,255	2,288
" 3 . .	2,809	1,382,785	6,563,600	7,946,385	1,375
" 4 . .	3,352	1,495,300	7,430,300	8,925,660	2,130
" 5 . .	1,305	988,800	4,665,100	5,653,900	934
Total,	13,678	$12,401,390	$38,691,900	$51,093,290	8,331

A comparison of the foregoing tables shows that the valuation of estates was : —

In 1881	$51,093,290
In 1882	50,668,280
Decrease in 1882	$425,010

The decrease above shown was owing to the operation of the recently enacted statute in relation to the taxation of mortgages, its effect being such as to reduce the valuation of personal property to a probable amount of upwards of two millions of dollars, and to cause a rise in the rate of taxation.

An increase in the number of polls and of dwellings appears as follows : —

	Polls.	Dwellings.
1882	13,922	8,489
1881	13,678	8,331
Increase	244	158

The amount assessed upon these polls, and upon the valuations hereinbefore given, was : —

In 1882	$868,937 45
In 1881	850,730 61
Increase	$18,206 84

Although our city suffered a considerable loss in its valuation, the increase in the rate of taxation on that account was only sixty cents above that of 1881, the amount being $16.60 per $1,000, with the usual discount of four per centum upon taxes paid on or before Oct. 10.

Considering the urgency of the calls, maintained up to the end of the year, for long-needed improvements and repairs, the further postponement of which would have been injurious to the public interests, the management of the city finances during the past year has required all the wisdom which could be brought to the work.

The difficulties to be met were clearly discerned at the beginning of the year, and it is a matter of congratulation that, through the harmonious action of the two branches of the City Council, an anticipated reduction in the valuation was met with only a slight increase in the rate of taxation.

JAMES A. FOX,
NATHAN G. GOOCH,
JOHN READ,
GEO. H. HOWARD,
GEO. A. ALLISON,
GEO. C. BENT,
FREDERICK H. HOLTON,
JAMES H. WELLS,
ARTHUR E. JONES,

Committee on Finance.

ANNUAL REPORT

OF

THE AUDITOR OF ACCOUNTS.

Gentlemen of the City Council: —

THE undersigned, in compliance with a city ordinance, herewith presents the thirty-sixth Annual Report of the receipts and expenditures of the city of Cambridge, being for the year ending Nov. 30, 1882.

Total receipts for the year	$1,945,850 01
Add the amount in treasury, Dec. 1, 1881 .	3,285 15
	$1,949,135 16
Total expenditures for the year	1,943,736 07
Balance in treasury, Nov. 30, 1882 . . .	$5,399 09

There has been no increase in the permanent debt of the city during the year.

Of this debt there have matured during the year: —

City Loan bonds	$84,000 00
Lowland Loan bonds	15,000 00
	$99,000 00

This amount has been paid from the Sinking Funds.

The following is a statement of the temporary loans negotiated during the year, and the rate of interest paid on the same: —

Jan.	2, 1882	. $125,000	Int. 4 per cent,	due	Oct.	10, 1882.
"	24, "	. 35,000	" 3 7/8	"	"	
Feb.	9, "	. 40,000	" 3 3/4	"	"	
March	9, "	. 30,000	" 3 3/4	"	"	
April	1, "	. 30,000	" 3 3/4	"	"	
"	10, "	. 40,000	" 3 3/4	"	"	
May	11, "	. 20,000	" 3 5/8	"	"	
June	10, "	. 20,000	" 3 1/2	"	"	
"	29, "	. 100,000	" 3 1/4	"	"	
July	10, "	. 25,000	" 3 1/2	"	"	
Sept.	9, "	. 60,000	" 3 3/4	"	"	
		$525,000				
Nov.	29, "	. 100,000	" 3 3/4	"	"	1883.
		$625,000				

THE CITY DEBT.

			1882.	1881.
Funded loan			$3,055,000 00	$3,154,000 00
Funded water loan			1,478,700 00	1,478,700 00
Temporary loan			100,000 00	
Trust funds: —				
Dowse Institute fund	$10,000			
Sanders Temperance fund	10,000			
Daniel White charity fund	5,000			
Fay fund	1,000			
Cemetery fund	4,400			
			30,400 00	26,000 00
Corporation tax			31 83	
National bank tax			5,838 40	
State and county taxes		$95,748 53		78,363 53
Less amounts due from State:				
Corporation tax	$48,208 75			
National bank tax	20,489 41			
State aid	14,892 00			
Burial of and aid to paupers	193 67			
		83,783 83	11,964 70	
			$4,681,934 93	$4,737,063 53

The means for paying the funded debt have been increased during the year as follows: —

Amount of both sinking funds, Nov. 30, 1831		$1,784,022 18
Less amounts paid into the treasury for the redemption of matured bonds		99,000 00
		$1,685,022 18
Amount appropriated by City Council in 1882	$209,220 00	
Interest accumulations during the year	80,408 08	289,628 08
Amount of both funds, Nov. 30, 1882 . . .		$1,974,650 26

The net city and water (funded) debt, Nov. 30, 1882, compared with the same debt, Nov. 30, 1881, is as follows: —

	1882.	1881.
Gross debt	$4,681,934 93	$4,737,063 53
Less amount in both sinking funds and cash in treasury .	1,980,049 35	1,784,307 33
	$2,701,885 58	$2,952,756 20
Decrease of net debt, Nov. 30, 1882	$250,870,62	

THE FUNDED DEBT.

Following is a statement of the total funded debt of the city, with the dates of maturity and rates of interest thereon: —

Bridge Loan.

Due July 1, 1884, interest 6 per cent .	$94,000	
July 1, 1885, " 6 " .	26,000	
		$120,000

Building Loan.

Due July 1, 1883, interest 6 per cent	$119,000	
April 1, 1884, " 6 "	198,000	
July 1, 1885, " 6 "	17,000	
		334,000
Amount carried forward		$454,000

Amount brought forward						$454,000
City Loan.						
Due July 1, 1886,	interest	6	per	cent	$100,000	
April 1, 1889,	"	5	"		100,000	
July 1, 1890,	"	6	"		20,000	
Jan. 1, 1893,	"	5	"	(gold)	150,000	
						370,000
Funding Loan.						
Due April 1, 1883,	interest	6	per	cent	$216,000	
July 1, 1884,	"	6	"		100,000	
July 1, 1885,	"	6	"		24,000	
						340,000
Land Loan.						
Due July 1, 1893,	interest	6	per	cent	$10,000	
						10,000
Lowland Loan.						
Due July 1, 1883,	interest	6	per	cent	$270,000	
April 1, 1884,	"	6	"		240,000	
Oct. 1, 1884,	"	6	"		56,000	
July 1, 1885,	"	6	"		122,000	
July 1, 1886,	"	6	"		60,000	
Oct. 1, 1887,	"	5	"		120,000	
						868,000
Paving Loan.						
Due July 1, 1893,	interest	6	per	cent	$100,000	
July 1, 1894,	"	6	"		130,000	
July 1, 1895,	"	6	"		25,000	
						255,000
Sewer Loan.						
Due Oct. 1, 1895,	interest	6	per	cent	$20,000	
July 1, 1896,	"	6	"		29,000	
July 1, 1903,	"	6	"		136,000	
July 1, 1904,	"	6	"		295,000	
July 1, 1905,	"	6	"		144,000	
						624,000
Amount carried forward						$2,921,000

Amount brought forward		$2,921,000
Street Loan.		
Due July 1, 1893, interest 6 per cent	$13,000	
		13,000
Street-widening Loan.		
Due July 1, 1886, interest 6 per cent	$7,000	
July 1, 1903, " 6 "	10,000	
July 1, 1904, " 6 "	90,000	
July 1, 1905, " 6 "	14,000	
		121,000
Water Loan.		
Due May 1, 1875, interest 6 per cent	$200	
Aug. 1, 1883, " 6 "	55,000	
July 2, 1886, " 6 "	100,000	
April 1, 1887, " 6 "	150,000	
April 1, 1888, " 6 "	175,000	
May 1, 1889, " 6 "	112,000	
July 1, 1890, " 6 "	60,000	
May 1, 1891, " 6 "	50,000	
July 1, 1892, " 6 "	335,000	
April 1, 1894, " 6 "	150,000	
April 1, 1895, " 6 "	160,000	
July 1, 1896, " 6 "	103,000	
July 1, 1897, " 6 "	16,000	
July 1, 1898, " 5 "	12,500	
		1,478,700
Total funded debt		$4,533,700

Dates of Maturity of Funded Loan.

Following is a statement of the total funded debt, showing the amount of bonds due and payable each year until all mature: —

1875	$200
1883	660,000
1884	688,000
1885	189,000
Amount carried forward	$1,537,200

Amount brought forward	$1,537,200
1886	267,000
1887	270,000
1888	175,000
1889	212,000
1890	80,000
1891	50,000
1892	335,000
1893	273,000
1894	280,000
1895	205,000
1896	132,000
1897	12,500
1898	16,000
1903	146,000
1904	385,000
1905	158,000
	$4,533,700

LIABILITIES AND ASSETS.

Liabilities.

Funded city loan	$3,055,000 00
Funded water loan	1,478,700 00
Temporary loan	100,000 00
State tax	69,540 00
National bank tax	5,838 40
Corporation tax	31 83
County tax	26,208 53
Trust funds	26,000 00
Cemetery fund	4,400 00
	$4,765,718 76

* Assets.

Cash in treasury	$5,399 09
Amount in sinking funds	1,491,512 45
Amount in sinking fund of water works	483,137 81
Amount carried forward	$1,980,049 35

* The above assets do not include the public buildings of the city, and other public property in use, not in the market for sale.

Amount brought forward	$1,980,049 35
Notes receivable secured by mortgage	23,762 50
City lands and surrendered estates	212,876 83
Uncollected taxes of 1881 and 1882	77,048 09
State aid due from Commonwealth	14,892 00
Corporation tax due from Commonwealth	48,208 75
National bank tax due from Commonwealth	20,489 41
Support and burial of paupers due from Commonwealth	193 67
Uncollected water bills	1,149 59
Uncollected miscellaneous bills	2,619 30
	$2,381,289 49

RECEIPTS.

The receipts of the year, as credited to the several city accounts, are as follows: —

No.		
1.	Bills Receivable	$825 00
2.	Bridges	1 00
3.	Bridges (West Boston, Craigie's, and Prison Point)	105 46
4.	Cambridge Public Library	2,494 47
5.	Cemeteries	13,018 30
6.	Cemetery Fund	1,150 00
7.	Engineering	32 50
8.	Fire Department	360 90
9.	Health Department	164 32
10.	Incidental Expenses	24,605 57
11.	Interest	3,358 63
12.	Lighting Streets	40 60
13.	Temporary Loan	525,000 00
"	Temporary Loan (to be paid from taxes of 1883)	100,000 00
14.	Pauper Department	3,637 21
15.	Pauper Department, Almshouse	3,768 05
16.	Pauper Department, House Offal	5,705 22
17.	Pike, James	1,081 00
18.	Police Department	5,367 15
19.	School Department, Salaries	1,010 71
20.	Sewers, Construction	3,222 81
21.	Sewers, Maintenance	897 32
22.	Sinking Funds, Commissioners of	99,000 00
23.	State Aid	15,523 07
24.	Street Department, Repairs	695 40
	Amount carried forward	$811,064 69

	Amount brought forward	$811,064 69
25.	Street Department, Watering	9,318 45
26.	Surrendered Estates	36 60
27.	Surrendered Estates, Care and Repairs	592 42
28.	Surrendered Estates, Sale account	3,203 75
29.	Tax, Corporation	48,721 63
30.	Tax, National Bank	20,185 19
31.	Taxes of 1878	410 40
32.	Taxes of 1879	508 00
33.	Taxes of 1880	2,482 40
34.	Taxes of 1881	55,982 63
35.	Taxes of 1882	809,344 73
36.	Tax Lien account	676 52
37.	Water Works, Maintenance	5 92
38.	Water Works, Rates, Fines, etc.	179,484 17
39.	Water Works, Supplies	3,832 51
		$1,945,850 01

EXPENSES.

The expenditures of the year, as charged to the city accounts, are as follows: —

No.		
1.	Abatements and Discounts	$43,013 98
2.	Bridges	5,902 84
3.	Bridges (West Boston, Craigie's, and Prison Point)	6,904 37
4.	Cambridge Public Library	6,927 52
5.	Cemeteries	13,644 25
6.	Engineering	6,727 49
7.	Fire Department	58,332 02
8.	Health Department	1,795 84
9.	Incidental Expenses	31,160 77
10.	Interest	197,804 96
11.	Interest on Water Loan	87,457 00
12.	Lighting Streets	23,283 01
13.	Loan, Temporary	525,000 00
14.	Loan, City Bonds (matured)	87,000 00
15.	Loan, Lowland (matured)	15,000 00
16.	Pauper Department	14,114 38
17.	Pauper Department, Almshouse	22,284 63
18.	Pauper Department, House Offal	9,885 87
19.	Police Department	61,896 64
20.	Salaries	23,508 28
21.	School Department, Drawing Schools	854 00
22.	School Department, Incidental Expenses	1,608 78
23.	School Department, Salaries	151,239 55
	Amount carried forward	$1,395,346 18

	Amount brought forward	$1,395,346 18
24.	School Department, Text Books and Stationery . .	3,659 18
25.	School Houses, Care and Repairs	37,027 71
26.	Sewers, Construction	24,459 11
27.	Sewers, Maintenance	10,711 26
28.	Shade Trees and Public Grounds	2,566 36
29.	Sinking Funds	164,865 00
30.	Sinking Fund of Water Works	44,355 00
31.	State Aid	16,902 79
32.	Stationery and Printing	3,142 34
33.	Street Department, Paving	11,357 19
34.	Street Department, Repairs	75,353 47
35.	Street Department, Watering	18,880 72
36.	Surrendered Estates, Care and Repairs	122 68
37.	Surrendered Estates, Sale Account	34 44
38.	Tax, National Bank	5,714 52
39.	Tax, County	26,208 53
40.	Tax, State	52,155 00
41.	Tax Lien account	61 76
42.	Water Works, Construction	16,959 12
43.	Water Works, Maintenance	28,870 06
44.	Water Works, Rates, Fines, etc.	1,299 02
45.	Water Works, Supplies	3,684 63
		$1,943,736 07

A statement in detail of the receipts and expenditures of each department, with its appropriations, and the balance unexpended, is given on the following pages.

FRANKLIN PERRIN,
Auditor of Accounts.

CAMBRIDGE, MASS., December, 1882.

N. B. For various items of supposed interest to the public, see the end of this report.

List of Appropriations for the Various City Departments, with the Receipts and Expenditures of the same for the Year ending Nov. 30, 1882, with the Additional Appropriations made to meet the November Bills.

CITY ACCOUNTS.	Original Appropriations.	Additional Appropriations to meet Nov. bills.	Estimated Revenue.	Actual Revenue.	Amount of Appropriation transferred to.	Amount of Appropriation transferred from.	State of Appropriation Nov. 30, 1882.	Expended.	Balance unexpended before Transfer.	Balance unexpended after Transfer.
Abatements and Discounts	$37,000 00	.....	.....	.....	$5,965 70	.....	$43,013 98	$43,013 98		
Bridges	4,500 00	$139 77	.....	$1 00	1,263 07	.....	5,902 84	5,902 84		
Bridges (West Boston, Craigie's, and Prison Point)	6,000 00	867 38	.....	105 46	36 99	.....	6,904 37	6,904 37		
Cambridge Public Library	4,000 00	628 49	$2,300 00	2,494 47	.....	$0 97	6,927 52	6,927 52	$0 97	
Cemeteries	.....	970 98	12,500 00	13,018 30	173 27	.....	13,644 25	13,644 25		
Engineering	6,200 00	543 60	.....	32 50	.....	16 16	6,727 49	6,727 49	16 16	
Fire Department	54,700 00	3,552 35	300 00	360 90	.....	220 33	58,332 02	58,332 02	220 33	
Health Department	1,800 00	128 34	200 00	164 32	.....	332 50	1,795 84	1,795 84	332 50	
Incidental Expenses	10,000 00	6,056 88	25,000 00	24,605 57	.....	9,896 11	31,160 77	31,160 77	9,896 11	
Interest	194,000 00	.....	3,000 00	3,358 63	804 96	.....	197,804 96	197,804 96		
Interest on Water Loan	.....	.....	88,585 00	.....	.....	.....	88,585 00	87,457 00	1,128 00	$1,128 00
Lighting Streets	20,000 00	2,234 87	.....	40 60	1,048 14	.....	23,283 01	23,283 01		
Pauper Department	12,500 00	483 40	5,000 00	3,637 21	130 98	4,000 00	14,114 38	14,114 38	4,000 00	
Pauper Department (Almshouse)	13,000 00	1,139 15	3,500 00	3,768 05	4,645 48	.....	22,284 63	22,284 63		
Pauper Department (House Offal)	2,500 00	781 10	5,500 00	5,705 22	1,104 77	.....	9,885 87	9,885 87		
Police Department	53,000 00	5,239 03	5,000 00	5,367 15	.....	1,342 39	61,896 64	61,896 64	1,342 39	
Salaries	21,700 00	1,808 28	.....	.....	.....	.....	23,508 28	23,508 28		
School Department (Drawing Schools)	725 00	154 00	.....	.....	.....	25 00	854 00	854 00	25 00	
School Department (Incidental Exp'ses)	1,500 00	74 50	.....	.....	34 28	.....	1,608 78	1,608 78		
School Department (Salaries)	138,000 00	13,911 00	1,000 00	1,010 71	.....	1,671 45	151,239 55	151,239 55	1,671 45	
School Department (Text-Books and Stationery)	3,700 00	120 77	.....	.....	.....	161 59	3,659 18	3,659 18	161 59	
School Houses (Care and Repairs)	34,500 00	1,118 70	.....	.....	1,409 01	.....	37,027 71	37,027 71		
Sewers (Construction)	12,000 00	3,976 63	8,000 00	3,222 81	482 48	.....	24,459 11	24,459 11		
Sewers (Maintenance)	9,500 00	258 90	500 00	897 32	452 36	.....	10,711 26	10,711 26		
Shade Trees and Public Grounds	2,500 00	68 10	.....	.....	.....	1 74	2,566 36	2,566 36	1 74	
Sinking Funds	164,865 00	.....	.....	.....	.....	.....	164,865 00	164,865 00		
Sinking Fund of Water Works	.....	.....	44,355 00	.....	.....	.....	44,355 00	44,355 00		
State Aid	.....	1,169 25	15,277 07	15,523 07	456 47	.....	16,902 79	16,902 79		
Stationery and Printing	3,000 00	257 62	.....	.....	.....	115 28	3,142 34	3,142 34	115 28	
Street Department (Paving)	11,500 00	1,280 47	.....	.....	.....	1,423 28	11,357 19	11,357 19	1,423 28	
Street Department (Repairs)	67,000 00	6,872 28	400 00	695 40	1,081 19	.....	75,353 47	75,353 47		
Street Department (Watering)	9,000 00	385 75	9,000 00	9,318 45	494 97	.....	18,880 72	18,880 72		
Surrendered Estates	.....	.....	.....	36 60						
Surrendered Estates (Care and Repairs)	.....	.....	500 00	592 42	.....	377 32	122 68	122 68	377 32	
Water Works (Construction)	20,000 00	375 06	.....	.....	.....	.....	20,375 06	16,959 12	3,415 94	3,415 94
Water Works (Maintenance)	.....	1,813 21	30,000 00	5 92	.....	105 76	31,707 45	28,870 06	2,943 15	2,837 39
Water Works (Rates, Fines, etc.)	.....	.....	2,000 00	179,484 17	.....	.....	2,000 00	1,299 02	700 98	700 98
Water Works (Supplies)	.....	578 87	3,000 00	3,832 51	105 76	.....	3,684 63	3,684 63		
Total	$918,690 00	$56,988 78	$264,917 07	$277,278 76	$19,689 88	$19,689 88	$1,240,644 13	$1,232,561 82	$27,772 19	$8,082 31

DETAILED STATEMENT.

SHOWING RECEIPTS AND EXPENDITURES, AND AMOUNTS APPROPRIATED UNDER EACH CITY ACCOUNT FOR THE FINANCIAL YEAR ENDING NOV. 30, 1882.

N. B. Additional appropriations were made by the City Council from unexpended funds in the City Treasury, to meet the payment of the November bills, so that the expenditures for the present year cover THIRTEEN MONTHS, viz., from Nov. 1, 1881, to Dec. 1, 1882. This action was taken in order hereafter to represent EXACTLY the expenses of the financial year, viz., from the first day of December in any year to the first day of December following.

Abatements and Discounts.

Amount appropriated	$37,000 00
*Add amount transferred to	5,965 70
Add amount taken from excess of revenue, and the only amount thus taken	48 28
	$43,013 98

EXPENDED.

For Abatements of taxes	$12,230 20	
Discounts on taxes	30,783 78	
Total, as per item No. 1 of expenses		$43,013 98

Bills Receivable.

RECEIVED.

On account of mortgage notes held by the city for surrendered estates (sale account), as per item No. 1 of receipts	$825 00

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* If from any cause an original appropriation falls short, the additional sum required can only be furnished by the City Council, which can transfer it from some appropriation which can spare it, or it can make a specific loan. Thus the City Council knows of and controls all expenditures.

Bridges.

Amount appropriated	$4,500 00
Amount appropriated for November bills	139 77
Add amount transferred to	1,263 07
	$5,902 84

RECEIVED.

For Old planks, as per item No. 2 of receipts, $1 00

EXPENDED (13 MONTHS).

For Advertising proposals	$5 25	
Draw-tending	701 67	
Hardware and tools	17 10	
Labor as per pay-roll	1,050 00	
Lumber	214 80	
Repairs at Brookline Bridge	3,906 02	
Stone cutting	8 00	
Total, as per item No. 2 of expenses		$5,902 84

Bridges (West Boston, Craigie's, and Prison Point).

Amount appropriated	$6,000 00
Amount appropriated for November bills	867 38
	$6,867 38
Add amount transferred to	36 99
	$6,904 37

RECEIVED.

For Old lumber	$5 00	
Sheathing	46 32	
Return of overpay on pay-roll	10 50	
Wharfage	43 64	
Total, as per item No. 3 of receipts		$105 46

EXPENDED (13 MONTHS).

For Buoy stone	$72 50	
Carting dirt	102 12	
Amount carried forward	$174 62	

Amount brought forward . . .	$174 62	
For Diving for making repairs . . .	12 00	
Furniture for Engineer's house .	10 00	
Fuel	267 00	
Gas	900 73	
Hardware	141 16	
Iron work	269 36	
Labor as per pay-roll, including salaries of Civil Engineer and Superintendents.	2,374 25	
Lumber	597 82	
Oil, matches, and supplies . . .	29 17	
Paints	3 60	
Piles	203 75	
Pump	48 55	
Paving	148 48	
Repairs, general	669 40	
Salary of Commissioner	541 66	
Sand	6 25	
Spars	9 00	
Water rates	19 50	
Watering streets and cleaning . .	478 07	
Total, as per item No. 3 of expenses		$6,904 37

Cambridge Public Library.

Amount appropriated	$4,000 00
Amount appropriated for November bills	628 49
Estimated revenue	2,300 00
	$6,928 49
Deduct amount transferred from	97
	$6,927 52

RECEIVED.

For Catalogues and fines	$143 24	
Dog licenses from county . . .	2,351 23	
Total, as per No. 4 of receipts . . .	$2,494 47	

EXPENDED (13 MONTHS).

For Advertising	$1 00	
Assistants, services of	2,496 44	
Binding books	554 75	
Books	1,386 48	
Directory	2 50	
Expressage, postage and fares	10 48	
Furniture and repairs	79 99	
Gas	298 08	
Gas piping	13 22	
Insurance	105 00	
Ice	8 00	
Magazines and papers	154 62	
Plumbing	75	
Printing	455 72	
Rent	1,250 00	
Stationery	67 64	
Statutes of Mass.	2 85	
Substitute	18 00	
Water rates	20 00	
Watering streets (proportion of expense)	2 00	
Total, as per item No. 4 of expense		$6,927 52

Cemeteries.

Amount appropriated for November bills		$970 98
Estimated revenue		12,500 00
		$13,470 98
Add amount transferred to		173 27
		$13,644 25

RECEIVED.

For Sale and care of lots	$11,316 55	
Burial fees	1,473 75	
Interest on cemetery fund for perpetual care of lots	228 00	
Total, as per item No. 5 of receipts	$13,018 30	

EXPENDED (13 MONTHS).

For Bricks	$11 00	
Car tickets	20 00	
Cement	48 50	
Cutting figures in stone	3 91	
Directory	2 50	
Expressage	1 55	
Fuel	55 00	
Hardware and tools	173 16	
Heating apparatus	22 35	
Headstones	79 50	
Labor as per pay-roll	8,502 29	
Labor, extra	75 63	
Lumber	62 97	
Lime	1 25	
Loam	946 80	
Money paid to laborers which was stolen from foreman, Oct. 14, 1882	550 16	
Manure	229 68	
Oil	1 25	
Paving stones	81 88	
Ploughing snow	21 00	
Plants	179 72	
Repairs (various)	12 64	
Seeds	12 42	
Supplies	13 63	
Sods	264 22	
Stationery and printing	68 64	
Stones for numbering lots	68 60	
Stones for foundations	26 00	
Stone posts	424 21	
Superintendent's salary	1,408 29	
Teaming	68 66	
Trees	51 00	
Water and repairs of hydrant	142 84	
Water pots	13 00	
Total, as per item No. 5 of expenses		$13,644 25

Cemetery Fund.

Amount of fund, Nov. 30, 1881	$3,250 00

RECEIVED.

For perpetual care of lots in Cambridge Cemetery, as per item No. 6 of receipts	$1,150 00
Amount of fund, Nov. 30, 1882	$4,400 00

Engineering.

Amount appropriated	$6,200 00
Amount appropriated for November bills	543 65
	$6,743 65
Deduct amount transferred from	16 16
	$6,727 49

RECEIVED.

For Maps	$17 50	
Use of plate	5 00	
Plan of Hastings Square . . .	10 00	
Total, as per item No. 7 of receipts .	$32 50	

EXPENDED (13 MONTHS).

For Assistants, services of	$3,647 19	
Bounds and sounding	5 50	
Car tickets and fares	154 88	
Directory	2 50	
Expressage	30	
Hardware, tools and supplies . .	58 31	
Instruments and repairs	10 00	
Lithographs	60 00	
Mounting plans	45 00	
Printing and stationery	32 48	
Salary, W. S. Barbour, Engineer .	2,708 33	
Scales	3 00	
Total, as per item No. 6 of expenses		$6,727 49

Fire Department.

Amount appropriated	$54,700 00
Amount appropriated for November bills	3,552 35
Estimated revenue	300 00
	$58,552 35
Deduct amount transferred from	220 33
	$58,332 02

RECEIVED.

For Rent of tenements	$199 94	
Manure	103 50	
Old hose and old iron	52 46	
Use of engine	5 00	
Total, as per item No. 8 of receipts	$360 90	

EXPENDED (13 MONTHS).

For Alarms for fires	$92 00	
Apparatus and repairs of same	897 94	
Bedding	23 82	
Carriage hire	6 00	
Damages to buildings (by fire-alarm wires)	28 92	
Enginemen, services of	31,597 02	
Enginemen (substitutes during vacations and sickness)	668 00	
Expenses of Chief attending Cincinnati Convention	64 00	
Expressage	27 90	
Fuel	1,220 79	
Fuel, cannel coal for engines	245 20	
Gas	936 12	
Hardware and tools	187 83	
Harnesses and repairs	172 70	
Hats and badges	21 50	
Hay, grain, and straw	3,419 70	
Horse	325 00	
Amount carried forward	$39,934 44	

Amount brought forward . . .	$39,934 44	
For Horse-hire and men extra . . .	981 75	
Horse-shoeing	496 05	
Houses, repairs of	975 99	
Hydrants, care of	210 25	
Hose and repairs of	1,412 06	
Printing and stationery	36 34	
Refreshments at fires	25 22	
Reception of Chief (Shaw) from London	75 75	
Rent of shed	90 00	
Reservoir cover	2 00	
Salary of T. J. Casey, Chief . .	1,250 00	
Salary of three assistants . . .	814 57	
Salary of clerk of board . . .	20 84	
Supplies at houses	435 34	
Supplies for chemical engine . .	75 18	
Telegraph supplies and repairs .	1,639 80	
Veterinary surgeon and medicines	150 98	
Washing	330 46	
Water for hydrants and reservoirs	8,940 00	
Water for hydrants, balance due for 1880 and 1881	270 00	
Water rates for engine houses . .	165 00	
Total, as per item No. 7 of expenses		$58,332 02

Health Department.

Amount appropriated	$1,800 00
Amount appropriated for November bills	128 34
Estimated revenue	200 00
	$2,128 34
Deduct amount transferred from	332 50
	$1,795 84

RECEIVED.

For Expenses of small-pox patient from the State, as per item No. 9 of receipts	$164 32

EXPENDED (13 MONTHS).

For Advertising	$1 35	
Analyses of meat and of water	30 00	
Bedding destroyed	6 00	
Board of small-pox patients	81 12	
Burying animals	11 50	
Car tickets	40 00	
Clerk of board	162 50	
Directory	2 50	
Disinfectants	35 42	
Horse and wagon, use of	4 00	
Medicines	4 22	
Salary of Dr. A. F. Holt, health officer	1,083 34	
Stationery, printing, and maps	43 39	
Vaccinations	290 50	
Total, as per item No. 8 of expenses		$1,795 84

Incidental Expenses.

Amount appropriated	$10,000 00
Amount apropriated for November bills	6,056 88
Estimated revenue	25,000 00
	$41,056 88
Deduct amount transferred from	9,896 11
	$31,160 77

RECEIVED.

For Armory rent from State	$800 00
County fines	12 00
Fees, collector's	1,282 40
Fees, city clerk	1,505 50
Fees, sealer's	306 61
Fees, weighers' (none).	
Fees, milk inspector	148 50
Gas	66 59
Amount carried forward	$4,121 60

	Amount brought forward . . .	$4,121 60
For	Licenses, grease	56 00
	Licenses, liquor	18,625 00
	Old iron	16 25
	Releases	27 28
	Recording deed	65
	Rent of public buildings . . .	1,756 79
	Wyeth's bill, erroneously paid .	2 00
Total, as per item No. 10 of receipts .		$24,605 57

EXPENDED (13 MONTHS).

For	Advertising	$815 01
	Assessors, assistant	909 00
	Assessors, clerical assistance to .	829 46
	Analysis of butter	15 00
	Bells, ringing	157 00
	Births, taking census of	285 00
	Bags, paper	3 25
	Boxes, paper	11 00
	Chest for lathe, for weights and measures	6 98
	Carriage hire	188 00
	Car tickets	615 00
	Cemetery in Ward 1, superintendent of	12 00
	Church clocks, care and repair of .	154 00
	Coal weighing	84 98
	Counterfeit detector	3 00
	Damages awarded Mullin . . .	1,028 30
	Damages awarded Jeremiah Dunning	125 00
	Damages awarded M. Conlan . .	25 46
	Damages awarded Esther E. Latour	30 25
	Damages awarded John Donovan .	130 25
	Damages awarded Patrick McCabe	150 00
	Amount carried forward . . .	$5,577 94

	Amount brought forward . . .	$5,577 94
For	Damages awarded John O'Donnell,	100 25
	Damages awarded Josiah H. Chipley	431 14
	Execution in favor of W. Gibbs .	73 35
	Overcharge on grading assessment, Nancy Richardson . . .	10 00
	Decoration Day	650 00
	Decorations for French guests . .	15 00
	Drinking fountains, care and repair of	7 25
	Deaths, returns of	4 00
	Deeds, recording	10 70
	Directories	45 45
	Experiments on Spruce Street sewer	62 89
	Expressage	52 15
	Flag-staffs and flags, repairs of .	79 00
	Frame for Garfield's picture . .	1 50
	Fees, milk licenses returned to J. H. Farrell	148 50
	Gas in ward-rooms	13 68
	Hay-scale repairs	13 23
	High School exhibition	50 00
	Invalid tax-titles	329 49
	Interest on Somerville tax . . .	8 56
	Legal expenses, examining titles, etc.	457 55
	Lettering tablet at Washington Elm	5 50
	Newspapers	13 00
	Notices, serving	113 25
	Page to Common Council . . .	50 00
	Post chains	3 50
	Post-office boxes, rent of . . .	8 00
	Printing	36 02
	Amount carried forward . . .	$8,370 90

Amount brought forward . . .		$8,370 90
For Rent of Temple Hall (for caucuses, etc.)		94 00
Rent of Cambridge Lyceum (for caucuses, etc.)		10 00
Refreshments for Committees . .		34 00
Scales, adjusting		6 75
* State proportion of liquor licenses for 1881		4,918 75
State proportion of liquor licenses for 1882		4,656 25
Stamps, hand, repairs		12 50
Secretary of Sinking Funds, services of		25 00
Safety deposit vaults, rent of . .		70 00
Shawsheen River hearing and report		361 22
Services, professional, as witnesses,		140 00
Shovelling snow		5 00
Statutes, Massachusetts		2 85
Salutes		37 00
Sealing weights and measures . .		161 77
Treasurer, clerical assistance . .		3,271 76
Telephone Despatch Co. . . .		80
Voting lists, posting and framing .		51 40
Ward officers		375 00
Ward rooms, care of		211 75
Ward room, care of boiler . . .		40 00
Water for ward rooms		9 00
City Hall: —		
Cleaning	$628 05	
Fuel	305 50	
Gas	330 97	
Ice	94 17	
Janitor	1,191 67	
Amounts carried forward,	$2,550 36	$22,865 70

* One fourth of liquor licenses for two years was paid to State, owing to the including of November bills.

Amounts brought forward,		$2,550 36	$22,865 70
For City Hall: —			
Repairs	307 98		
Supplies	256 50		
Water	70 00		
		3,184 84	
Central Square Building: —			
Fuel	$338 90		
Gas	239 04		
Janitor	1,235 00		
Piping	20 36		
Repairs	171 67		
Supplies	17 91		
Water	174 14		
		2,197 02	
Ward One Building: —			
Fuel	$660 95		
Gas	557 77		
Janitor	1,235 00		
Repairs	248 79		
Supplies	17 08		
Water	193 62		
		2,913 21	
Total, as per item No. 9 of expenses			$31,160 77

Interest.

Amount appropriated	$194,000 00
Estimated revenue	3,000 00
	$197,000 00
Add amount transferred to	804 96
	$197,804 96

RECEIVED.

On taxes and assessments	$3,232 15	
On bonds	126 48	
Total, as per item No. 11 of receipts		$3,358 63

EXPENDED.

For Interest on Dowse Institute Fund .	$900 00	
Interest on Daniel White Charity Fund	300 00	
Interest on Funded Loan . . .	185,890 00	
Interest on Cambridge Public Library, city note	60 00	
Interest on Cemetery Fund . .	228 00	
Interest on Somerville taxes . .	4 17	
Interest on Sanders Temperance Fund	600 00	
Interest on over-draft First National Bank	102 74	
Interest on temporary loan . . .	9,720 05	
Total, as per item No. 10 of expenses		$197,804 96

Interest on Water Loan.

Amount transferred from Water Works (Rates, Fines, etc.)	$88,585 00

EXPENDED.

As per item No. 11 of expenses	87,457 00
Balance unexpended	$1,128 00

Lighting Streets.

Amount appropriated	$20,000 00
Amount appropriated for November bills . . .	2,234 87
	$22,234 87
Add amount transferred to	1,048 14
	$23,283 01

RECEIVED.

For Old materials and damages, as per item No. 12 of receipts	$40 60	

EXPENDED.

For Alcohol	$46 00	
Car tickets	5 00	
Directory	2 50	
Expressage	1 20	
Gas	15,237 95	
Hardware	150 63	
Ladders, repairs of	75	
Lamps, care of	6,571 61	
Lamp-posts and repairs	81 66	
Lanterns and repairs	397 91	
Oil and matches	149 03	
Printing	12 58	
Piping	21 52	
Putty	5 56	
Salary of superintendent	454 16	
Thimbles and acorns	8 20	
United States Street Lighting Co.	136 75	
Total, as per item No. 12 of expenses		$23,283 01

Loan (Temporary).

RECEIVED.

For city notes issued during the year, as per item No. 13 of receipts	$625,000 00

EXPENDED.

For city notes due and paid Oct. 10, 11, 12, and 13, as per item No. 13 of expenses	$525,000 00
Payable from taxes of 1883	$100,000 00

Loan (City Bonds).

EXPENDED.

For matured City Loan bonds, as per item No. 14 of expenses	$87,000 00

Loan (Lowland Bonds).

For matured Lowland bonds, as per item No. 15 of expenses	$15,000 00

Pauper Department.

Amount appropriated	$12,500 00
Amount appropriated for November bills . .	483 40
Estimated revenue	5,000 00
	$17,983 40
Deduct amount transferred from	4,000 00
	$13,983 40
Add amount transferred to	130 98
	$14,114 38

RECEIVED.

For aid to paupers, as per item No. 14 of receipts	$3,637 21	

EXPENDED.

For Arrest of lunatic pauper . . .	$11 28	
Boots and shoes	68 47	
Car tickets and fares	238 14	
Clerk of board	294 50	
Cutting wood	30 41	
Directory map and statutes . . .	7 85	
Expressage and moving furniture,	2 05	
Fuel	883 91	
Groceries	1,028 18	
Hardware	41	
Medical attendance	43 80	
Medicines	302 33	
Nurse	38 50	
Paupers, aid to	4,523 25	
Paupers, board of	3,163 59	
Paupers, burial of	292 00	
Provisions	297 92	
Printing	26 25	
Amount carried forward . . .	$11,252 84	

Amount brought forward . . .	$11,252 84	
For Piping	12 40	
Rent of tenements	662 77	
Repairs of supply pung . . .	7 00	
Secretary, D. P. Muzzey . . .	620 00	
Secretary and Visitor, V. Danforth	1,475 00	
Signs	2 60	
Stamps and stationery	80 97	
Washing windows	80	
Total, as per item No. 16 of expenses		$14,114 38

Pauper Department (Almshouse).

Amount appropriated		$13,000 00
Amount appropriated for November bills		1,139 15
Estimated revenue		3,500 00
		$17,639 15
Add amount transferred to		4,645 48
		$22,284 63

RECEIVED.

For Board of paupers	$705 34	
Ledge and farm products . . .	3,062 71	
Total, as per item No. 15 of receipts .	$3,768 05	

EXPENDED.

For Bedding	$5 50	
Boots and shoes	335 95	
Car tickets and fares	21 24	
Chaplain, services of	100 00	
Crockery	41 06	
Damages from blasting	25 58	
Directory	2 50	
Disinfectants	27 92	
Dry goods and clothing	1,058 10	
Expressage	5 05	
Amount carried forward . . .	$1,622 90	

	Amount brought forward . . .	$1,622 90
For	Fish	424 04
	Fuel	1,813 04
	Furniture and repairs	24 51
	Fruit	11 40
	Gas	186 26
	Groceries	2,073 67
	Gardening	5 00
	Grindstone	10 00
	Hardware and tools	375 41
	Hay, grain and straw	755 90
	Horse-shoeing	99 66
	Ice	131 01
	Ice cream	6 00
	Labor as per pay-roll	2,189 00
	Labor on farm	373 46
	Labor on ledge	692 50
	Labor, extra in house	45 42
	Lime and cement	41 05
	Live stock	177 00
	Lumber	85 49
	Manure	106 50
	Medicines	200 35
	Mason and whitewashing . . .	58 50
	Music teacher	31 50
	Newspapers	15 75
	Nurse	13 00
	Oil	26 85
	Organist	25 00
	Powder	130 55
	Provisions	5,774 79
	Presents	8 00
	Repairs on house, heating apparatus, etc.	560 86
	Repairs on wagons	106 87
	Repairs on sewing machine . . .	3 15
	Stationery	9 00
	Amount carried forward . . .	$18,213 39

Amount brought forward . . .	$18,213 39	
For Spectacles	2 25	
Seeds	165 93	
Supplies	76 18	
Tax on farm to Somerville for 1881,	978 90	
Tax on farm to Somerville for 1882,	893 56	
Tinware	14 20	
Tobacco	169 38	
Warden's salary	1,083 33	
Washing and cleaning	186 00	
Water	445 02	
Wooden ware	56 49	
Total, as per item No. 17 of expenses		$22,284 63

Pauper Department (House Offal).

Amount appropriated		$2,500 00
Amount appropriated for November bills		781 10
Estimated revenue		5,500 00
		$8,781 10
Add amount transferred to		1,104 77
		$9,885 87

RECEIVED.

For offal, as per item No. 16 of receipts,	$5,705 22	

EXPENDED.

For Clay	$2 50	
Drain, repairs of	10 75	
Harnesses, and repairs of . . .	172 52	
Hay, grain, and straw	891 30	
Hardware	14 04	
Horses	560 00	
Horse-shoeing	86 15	
Iron work	177 94	
Labor as per pay-roll	7,616 78	
Lumber	21 89	
Veterinary surgeon	12 00	
Wagon	320 00	
Total, as per item No. 18 of expenses		$9,885 87

Police Department.

Amount appropriated		$53,000 00
Amount appropriated for November bills		5,239 03
Estimated revenue		5,000 00
		$63,239 03
Deduct amount transferred from		1,342 39
		$61,896 64

RECEIVED.

For Arrests and recovery of property	$15 00	
Court fees	5,329 15	
Use of ropes, team, etc.	23 00	
Total, as per item No. 18 of receipts		$5,367 15

EXPENDED.

For Analyzing beer	$28 75	
Animals, burying	3 00	
Advertising	3 50	
Boat, care of	8 50	
Buttons, straps, and wreaths	119 75	
Carriage hire	1 50	
Cleaning stations	120 80	
Directories	15 00	
Expressage and teaming	81 36	
Food for prisoners	74 49	
Fuel	208 20	
Gas	600 04	
Hardware and tools	13 46	
Hay, grain, and straw	255 67	
Harnesses and repairs	91 65	
Horse-shoeing	49 63	
Horse boarding	171 41	
Massachusetts Public Statutes	11 40	
Medical attendance	38 70	
Policemen, services of	57,354 86	
Printing and bill posting	47 23	
Procuring evidence	2 00	
Amount carried forward	$59,300 90	

Amount brought forward . . .	$59,300 90	
For Repairs at stations	332 89	
Repairs on telephone	16 75	
Repairs of vehicles	24 75	
Rent of telephone	105 56	
Removing ashes	4 00	
Salary of F. W. Hagar (Chief) .	1,733 33	
Supplies for stations	249 16	
Travelling expenses and photographs	86 95	
Telegrams	1 35	
Water rates	41 00	
Total, as per item No. 19 of expenses		$61,896 64

Salaries.

Amount appropriated	$21,700 00
Amount appropriated for November bills	1,808 28
	$23,508 28

EXPENDED (13 MONTHS).

Paid James A. Fox, mayor	$1,950 00	
Justin A. Jacobs, city clerk . .	3,250 00	
Walter W. Pike, assistant clerk .	1,300 00	
William W. Dallinger, city treasurer	3,250 00	
William W. Dallinger, treasurer of sinking funds	216 66	
Franklin Perrin, city auditor . .	1,625 00	
John McDuffie, clerk of committees	1,950 00	
J. Warren Cotton, clerk of Common Council	216 66	
Francis L. Pratt, city messenger,	1,516 66	
John W. Hammond, solicitor .	2,166 66	
A. Z. Brown, assessor	1,408 33	
E. B. Whitman, assessor . . .	1,408 33	
A. J. Green, assessor	1,408 33	
Amount carried forward . . .	$21,666 63	

Amount brought forward . . .	$21,666 63	
Paid H. P. Walcott, city physician .	1,083 33	
Benj. F. Nourse, sealer of weights and measures	379 16	
John H. Farrell, inspector of milk	189 58	
John H. Farrell, inspector of vinegar	189 58	
Total, as per item No. 20 of expenses		$23,508 28

School Department (Drawing Schools).

Amount appropriated		$725 00
Amount appropriated for November bills		154 00
		$879 00
Deduct amount transferred from		25 00
		$854 00

EXPENDED.

For teachers, as per item No. 21 of expenses . .		$854 00

School Department (Incidental Expenses).

Amount appropriated		$1,500 00
Amount appropriated for November bills		74 50
		$1,574 50
Add amount transferred to		34 28
		$1,608 78

EXPENDED.

For Advertising	$12 75	
Books, blackboards, maps, etc. .	78 05	
Car tickets and fares	81 55	
Chart and frames	9 30	
Chemicals and test tubes . . .	33 74	
Examinations, extra help . . .	10 00	
Expressage	1 25	
Globes	160 00	
Amount carried forward . . .	$386 64	

Amount brought forward . . .	$386 64	
For Librarian	200 00	
Lithographer	119 95	
Page to School Committee . . .	20 00	
Pianos, tuning and moving . . .	18 00	
Printing	426 09	
Ribbons and boxes	16 15	
Secretary to School Committee .	300 00	
Substitute	59 00	
Tablet	3 15	
Tabulating census returns . . .	59 80	
Total, as per item No. 22 of expenses		$1,608 78

School Department (Salaries).

Amount appropriated	$138,000 00
Amount appropriated for November bills . . .	13,911 00
Estimated revenue	1,000 00
	$152,911 00
Deduct amount transferred from	1,671 45
	$151,239 55

RECEIVED.

For Hopkins Fund, income of . . .	$783 96	
Tuition of non-resident pupils . .	226 75	
Total, as per item No. 19 of receipts .	$1,010 71	

EXPENDED (13 MONTHS).

For Superintendent of schools, salary .	$2,970 00	
Teachers, salaries of	145,344 55	
Truant officers, salaries of . . .	2,925 00	
Total, as per item No. 23 of expenses		$151,239 55

School Department (Text Books and Stationery).

Amount appropriated	$3,700 00
Amount appropriated for November bills	120 77
	$3,820 77
Deduct amount transferred from	161 59
	$3,659 18

EXPENDED (13 MONTHS).

For Books	$2,508 08	
Stationery	1,151 10	
Total, as per item No. 24 of expenses		$3,659 18

School-Houses (Care and Repair).

Amount appropriated	$34,500 00
Amount appropriated for November bills	1,118 70
	$35,618 70
Add amount transferred to	1,409 01
	$37,027 71

EXPENDED (13 MONTHS).

For Ashes, removing	$3 60
Alarm box	20 00
Blackboards	81 06
Care of school-room in police building	38 10
Fuel	7,347 01
Furniture and repairs	805 66
Gas	166 58
Gas fixtures and piping	32 62
Grading	353 81
Hardware and tools	213 45
Ink-wells	65 66
Janitors	8,919 35
Janitors' supplies	189 18
Lightning rods	4 00
Lumber	188 44
Repairs, carpenter work	1,235 23
Repairs, heating apparatus	1,426 22
Repairs, mason work	807 33
Repairs, painting	883 42
Repairs, plumbing	179 31
Repairs, plastering	52 17
Repairs of roofs	492 09
Amount carried forward	$23,504 29

Amount brought forward . . .	$23,504 29	
For Repairs, general	620 88	
Washing towels	1 00	
Water	581 21	
Ordinary expenses	$24,707 38	
New school-house in Ward Four .	12,320 33	
Total, as per item No. 25 of expenses		$37,027 71

Sewers (Construction).

Amount appropriated	$12,000 00
Amount appropriated for November bills	3,976 63
Estimated revenue	8,000 00
	$23,976 63
Add amount transferred to	482 48
	$24,459 11

RECEIVED.

For Assessments	$3,215 61	
Earth for filling	7 20	
	$3,222 81	

EXPENDED.

For Bricks	$852 88	
Boots, rubber, and repairs . . .	88 65	
Catch-basins	947 45	
Castings	82 89	
Carpenter work	49 65	
Cement	273 10	
Chain	3 84	
Covers, iron	154 67	
Drain pipe	2,127 79	
Expressage	16 00	
Horse and wagon	71 50	
Hoisting machine	303 00	
Hose	18 50	
Iron work	168 06	
Inspection of sewers	205 70	
Amount carried forward . . .	$5,363 68	

Amount brought forward . . .	$5,363 68	
For Labor, as per pay-roll	6,751 11	
Lumber.	2,087 61	
Man-holes	90 00	
Meal bags, oat meal, etc. . . .	11 08	
Overseer	519 00	
Paving	141 68	
Piles.	62 40	
Plumbing	11 65	
Repairing leak	6 10	
Rope and chafing gear	14 25	
Sail, old	26 60	
Sand and stone	7 25	
Sewers, constructing.	8,252 21	
Setting up wire rope	18 14	
Teaming	547 88	
Tools and repairs	487 35	
Tubs and gin wheels	61 12	
Total, as per item No. 26 of expenses		$24,459 11

Sewers (Maintenance).

Amount appropriated		$9,500 00
Amount appropriated for November bills		258 90
Estimated revenue		500 00
		$10,258 90
Add amount transferred to		452 36
		$10,711 26

RECEIVED.

For Changing man-holes	$51 25	
Connecting drains	3 25	
Experiments on Spruce Street sewer.	62 89	
Replacing flagstones	16 63	
Repairs, labor and materials . .	76 53	
Somerville's proportion of sewer repairs	328 05	
Switch table	38 47	
Use of engine	320 25	
Total, as per item No. 21 of receipts .	$897 32	

EXPENDED.

For Boots and clothing of rubber	$40 29	
Bricks	562 35	
Brass pipe	6 40	
Car tickets	63 75	
Catch-basin covers	31 50	
Castings, covers and rings	420 90	
Cement	176 60	
Cleaning sewers	620 50	
Desk	1 25	
Expressage	6 40	
Engine repairs	18 25	
Fuel	7 00	
Grindstone	7 00	
Hardware, tools and repairs	469 84	
Hay and grain	94 56	
Horse	150 00	
Horse, board of	14 00	
Horse-shoeing	8 00	
Horse and wagon, use of	161 47	
Hose, repairs of	23 26	
Labor, as per pay-roll	4,177 20	
Labor, extra	17 58	
Lumber and carpenter work	1,158 09	
Overseer	802 80	
Oak pins	26 53	
Pipe, drain	286 40	
Pump, use of	4 00	
Painting	3 50	
Printing	15 00	
Stationery	24 99	
Stove	7 50	
Supplies	46 45	
Teaming	1,029 22	
Wagon, harness, robes, and repairs	187 05	
Water, piping	35 63	
Water	6 00	
Total, as per item No. 27 of expenses		$10,711 26

Shade Trees and Public Grounds.

Amount appropriated	$2,500 00
Amount appropriated for November bills	68 10
	$2,568 10
Deduct amount transferred from	1 74
	$2,566 36

EXPENDED.

For Castings	$33 79	
Flag-staff and repairs	219 00	
Fence repaired	9 89	
Gravel, loam, and sods	84 75	
Hardware	24 69	
Labor, as per pay-roll	1,269 02	
Lawn mower, repairs of	5 00	
Painting	3 37	
Pump and drinking fountain, repairs of	87 57	
Rent of land for nursery	20 00	
Stencils	1 45	
Shutting off water	4 00	
Trees	15 20	
Tree oil	8 75	
Tulips and plants	90 88	
Wagon repairs	19 00	
Water for fountains	640 00	
Water for hose	30 00	
Total, as per item No. 28 of expenses		$2,566 36

Sinking Funds, Commissioners of.

Amount of funds, Nov. 30, 1881		$1,356,391 87

RECEIVED.

From City Treasurer, amount appropriated by City Council	$164,865 00	
Interest accumulations to Nov. 30, 1882	69,255 58	
		234 120 58
Amount carried forward		$1,590,512 45

Amount brought forward		$1,590,512 45
EXPENDED.		
For Matured City Loan bonds . .	$84,000	
Matured Lowland Loan bonds .	15,000	
		99,000 00
Amount of Sinking Funds, Nov. 30, 1882 . .		$1,491,512 45

Sinking Fund of Water Works, Trustees of.

Amount of fund, Nov. 30, 1881		$427,630 31
RECEIVED.		
For amount of revenue transferred from Water Works (rates, fines, etc.)	$44,355 00	
Interest accumulations to Nov. 30, 1882	11,152 50	
		55,507 50
Amount of Sinking Fund of Water Works, Nov. 30, 1882		$483,137 81

State Aid.

Estimated revenue		$15,277 07
Additional appropriation for November . . .		1,169 25
		$16,446 32
Amount transferred to		456 47
		$16,902 79
RECEIVED.		
For allotment from Commonwealth	$15,217 07	
Amount reimbursed from other cities and towns	306 00	
Total, as per item No. 23 of receipts	$15,523 07	
EXPENDED.		
For Aid to paupers	$109 27	
Clerical aid to committee . .	303 75	
Indigent soldiers	3,835 00	
Military aid	12,653 27	
Printing	1 50	
Total, as per item No. 31 of expenses		$16,902 79

Stationery and Printing.

Amount appropriated		$3,000 00
Amount appropriated for November bills		257 62
		$3,257 62
Deduct amount transferred from		115 28
		$3,142 34

EXPENDED.

For Printing	$2,022 11	
Stationery	1,120 23	
Total, as per item No. 32 of expenses		$3,142 34

Street Department (Paving).

Amount appropriated		$11,500 00
Amount appropriated for November bills		1,280 47
		$12,780 47
Deduct amount transferred from		1,423 28
		$11,357 19

EXPENDED.

For Advertising	$13 80	
Bricks	588 77	
Labor as per pay-rolls	5,371 15	
Labor laying edgestones	384 84	
Paving blocks	3,926 45	
Stones, flagging	627 25	
Stones, ballast	392 09	
Gravel	52 84	
		$11,357 19

Street Department (Repairs).

Amount appropriated		$67,000 00
Amount appropriated for November bills		6,872 28
Estimated revenue		400 00
		$74,272 28
Add amount transferred to		1,081 19
		$75,353 47

RECEIVED.

For Ashes and street scrapings	$622 05
Blocks	6 00
Damages to railing	3 50
Changing post	20 00
Weighing coal	65
Old materials	2 50
Paving blocks	14 70
Trees	20 00
Trimming trees	3 00
Feeding cow in pound	3 00
Total, as per item No. 24 of receipts	$695 40

EXPENDED.

For Ashes from city of Boston	$50 50
Boiler, repairs of	4 15
Carts (four)	480 00
Car tickets and fares	33 00
Carriage hire	6 00
Castings	13 69
Cement	22 34
Chain	1 50
Directory	2 50
Freight on castings	9 76
Fuel	244 92
Gas	144 27
Gravel and sand	318 10
Gravel, teaming	7,221 18
Grease, axle	11 35
Hardware, tools and repairs	1,257 20
Hay and grain	5,118 90
Hand stamp, repairs of	2 25
Harness	13 00
Horses	1,525 00
Horse medicines	26 72
Horse-shoeing	125 95
Amount carried forward	$16,632 28

	Amount brought forward . . .	$16,632 28
For	Horse, pasturing	6 00
	Horse and wagon, use of . . .	18 00
	Iron for blacksmith	234 73
	Iron work	214 64
	Inspection of bulkhead, Brookline Bridge causeway	21 30
	Labor, as per pay-rolls	47,433 04
	Labor, extra	135 18
	Lacings	1 32
	Lumber	588 98
	Note for gravel, paid July 1 . .	2,717 46
	Oil	40 97
	Piping	87 14
	Printing	19 00
	Ploughing gutters	9 00
	Plumbing	70
	Repairs, carpenter's work . . .	5 75
	Repairs of harnesses	273 59
	Repairs of wagons	208 87
	Repairs of sidewalks	10 00
	Repairs, fence at causeway West Boston Bridge	114 29
	Rent of land	70 00
	Sawing stock	12 81
	Soap	18 70
	Salary of B. W. Woodard, superintendent	1,841 66
	Stove and stovepipe	19 48
	Signs	53 25
	Stone for paving and ballast . .	4,101 28
	Stone cutting	18 00
	Supplies	95 03
	Tar	2 00
	Tanks	11 01
	Veterinary surgeon and medicines	53 50
	Window frames and windows . .	43 50
	Amount carried forward . . .	$58,480 18

Amount brought forward . . .	$58,480 18	
For Wharfage	75 00	
Water	141 39	
Wire cloth	11 50	
Wheels	13 12	
Total, as per item No. 34 of expenses . . .		$75,353 47

Street Department (Watering).

Amount appropriated	$9,000 00
Amount appropriated for November bills	385 75
Estimated revenue	9,000 00
	$18,385 75
Add amount transferred to	494 97
	$18,880 72

RECEIVED.

For watering streets, as per item No. 25 of receipts	$9,318 45	

EXPENDED.

For Carts, repairs of	$178 20	
Hardware	37 00	
Oil, brushes, and lead	31 66	
Plank, oak	28 38	
Repairs of stand-pipes	105 49	
Tarred marline	11 68	
Labor	75 75	
Shutting off water	7 60	
Watering streets	13,232 23	
Water	5,118 18	
Water piping and supplies . . .	54 55	
Total, as per item No. 35 of expenses		$18,880 72

Surrendered Estates.

RECEIVED.

For grading assessments as per item No. 26 of receipts	$36 60

Surrendered Estates (Care and Repairs).

Estimated revenue		$500 00
Deduct amount transferred from		377 32
		$122 68

RECEIVED.

For rents, as per item No. 27 of receipts	$592 42	

EXPENDED.

For Repairs	$90 68	
Shovelling snow	3 00	
Water rates	29 00	
Total, as per item No. 36 of expenses		$122 68

Surrendered Estates (Sale Account).

RECEIVED.

For payments on estates, as per item No. 28 of receipts	$3,203 75

EXPENDED.

For brokerage on sale of land, as per item No. 37 of expenses	34 44
Net receipts	$3,169 31

Tax, National Bank.

RECEIVED.

Amount received from Commonwealth, as per item No. 30 of receipts	$20,185 19

EXPENDED.

Amount paid to Commonwealth, as per item No. 38 of expenses	5,714 52
Net receipts	$14,470 67

Tax, County.

Amount paid county of Middlesex, as per item No. 39 of expenses	$26,208 53

Tax, State.

Amount paid Commonwealth, as per item No. 40 of expenses	$52,155 00

Taxes of 1878.

Amount uncollected Nov. 30, 1881	$7,608 67
RECEIVED.	
Amount collected from sundry persons, as per item No. 31 of receipts	410 40
Balance uncollected Nov. 30, 1882	$7,198 27

Taxes of 1879.

Amount uncollected Nov. 30, 1881	$8,850 32
RECEIVED.	
Amount collected from sundry persons, as per item No. 32 of receipts	508 00
Amount uncollected Nov. 30, 1882	$8,342 32

Taxes of 1880.

Amount uncollected Nov. 30, 1881	$10,514 88
RECEIVED.	
Amount collected from sundry persons, as per item No. 33 of receipts	2,482 40
Amount uncollected Nov. 30, 1882.	$8,032 48

Taxes of 1881.

Amount uncollected Nov. 30, 1881	$68,562 84
Additional warrant from assessors	19 20
	$68,582 04
RECEIVED.	
Amount collected from sundry persons, as per item No. 34 of receipts	55,982 63
Amount uncollected Nov. 30, 1882.	$12,599 41

Taxes of 1882.

Amount of assessors' original warrant	$873,633 89
Amount of assessors' supplemental warrant	159 52
	$873,793 41

RECEIVED.

Amount collected from sundry persons, as per item No. 35 of receipts	809,344 73
Balance uncollected Nov. 30, 1882	$64,448 68

Tax Lien Account.

Balance Nov. 30, 1881	$17,543 31

EXPENDED.

For tax title, as per item No. 41 of expenses	61 76
	$17,605 07

RECEIVED.

For releases, as per item No. 36 of receipts	676 52
Balance Nov. 30, 1882	$16,928 55

Water Works (Construction).

Amount appropriated from revenue of Water Works (Rates, Fines, etc.)	$16,584 06
Amount appropriated for November bills	375 06
	$16,959 12

EXPENDED.

For Boxes, kyanized	$106 56	
Bricks	61 82	
Bolts	8 76	
Castings	121 30	
Cement	3 30	
Flanges	259 45	
Hose	8 55	
Hydrants	784 95	
Iron	12 80	
Amount carried forward	$1,367 49	

Amount brought forward . . .	$1,367 49	
For Lead, pig	625 70	
Lime	12 00	
Labor, as per pay-roll	3,684 61	
Lumber	12 43	
Mason	53 88	
Meters	847 06	
Nozzles	41 40	
Oil cups	38 00	
Plate iron and labor	13 95	
Pipe, galvanized	809 21	
Piping	6,152 91	
Packing	192 90	
Pans	10 00	
Paints	35 02	
Pump	1,678 00	
Stone cutter	28 00	
Teaming	293 31	
Valves, swing	310 25	
Valves, check	753 00	
Total, as per item No. 42 of expenses		$16,959 12

Water Works (Maintenance).

Revenue from Water Works (Rates, Fines, etc.) .		$27,056 85
Additional appropriation for November bills . .		1,813 21
		$28,870 06

RECEIVED.

For Duplicate bills, as per item No. 37 of receipts	$5 92

EXPENDED.

For Air-chambers	$16 01
Badge	50
Blacksmith work	4 00
Boots, rubber	7 90
Amount carried forward . . .	28 41

	Amount brought forward . . .	$28 41
For	Blankets, horse	11 00
	Boxes, gate	186 71
	Boxes, hydrant	463 71
	Bricks	26 10
	Car tickets and fares	180 04
	Castings	356 61
	Clerical aid	1,083 33
	Clerk of board	216 66
	Directories	7 50
	Desk, repairs	75
	Expressage	58 46
	One half expense of extra train on Fitchburg Railroad on account of bridge repairs	3 75
	Examination of stand-pipe . . .	39 00
	Food for men repairing break . .	3 27
	Frames	4 00
	Fuel	4,417 00
	Grease	3 00
	Handles, hydrant	1 50
	Hay and grain	375 31
	Harness and repairs	45 00
	Hardware, tools, and repairs . .	401 47
	Hose	53 58
	Horse	125 00
	Horse and wagon, use of . . .	8 75
	Horse-shoeing	82 01
	Horse, clipping	3 00
	Horse, food	3 25
	Insurance	17 50
	Inspector	1,113 76
	Lumber	11 88
	Lime and cement	3 95
	Labor, as per pay-roll	10,104 16
	Labor on hydrants	45 87
	Lead	118 60
	Manure	13 50
	Amount carried forward . . .	$19,617 39

	Amount brought forward . . .	$19,617	39
For	Meters, repairs of	91	74
	Mowing Tudor Park	10	00
	Newspaper	8	50
	Oil	107	52
	Pipe, drain	576	53
	Paper hangings	19	57
	Painting	240	35
	Paving	4	96
	Printing	55	03
	Plumbing	18	25
	Packing	142	62
	Pipes and fittings	670	80
	Registrar, J. Warren Cotton, salary	2,166	67
	Rings, etc.	19	44
	Repairs at Porter's Bridge . . .	12	93
	Rent of wharf	50	00
	Rent of office for one year, eleven months, to Dec. 1, 1882 . . .	1,150	00
	Repairs of boilers	682	47
	Repairs, mason work	148	00
	Repairs, piping	100	72
	Repairs, carpenter's work . . .	480	61
	Stencil plate		20
	Springs, rubber	5	00
	Superintendent, H. Nevons, salary,	1,966	67
	Supplies	20	63
	Stationery	94	07
	Stone	2	00
	Stone cutting	1	00
	Telephone, rent	120	00
	Telegram		76
	Teaming	174	80
	Waste	23	21
	Wagon, repairs	87	62
Total, as per item No. 43 of expenses			$28,870 06

Water Works (Rates, Fines, etc.).

RECEIVED.

For amount of rates, fines, etc., as per item No. 38 of receipts		$179,484 17
Deduct amount transferred to Interest on water loan	$87,457 00	
Deduct amount transferred to Sinking Fund of Water Works	44,355 00	
Deduct amount transferred to Water Works (Construction)	16,959 12	
Deduct amount transferred to Water Works (Maintenance)	28,870 06	177,641 18
		$1,842 99

EXPENDED.

For Water Rates refunded, as per item No. 44 of expenses	1,299 02
Balance unexpended	$543 97

Water Works (Supplies).

RECEIVED.

For Supply pipes and fittings, as per item No. 39 of receipts	$3,832 51

EXPENDED.

For Labor, as per pay-roll	$1,301 63	
Hydrants	99 90	
Supplies, pipes and fittings	2,283 10	
Total, as per item No. 45 of expenses		3,684 63
Balance unexpended		$147 88

TABLES

Showing valuation and taxes for 1882, abatements and discounts for the past five years, rates of taxation, as compared with those of other cities, fees from liquor licenses, and an analysis of the city debt: —

Taxes.

The amount of taxes assessed by the Board of Assessors on the real and personal estates and polls of the city of Cambridge, for the year 1882, was as follows: —

Valuation of real estate	$39,091 200
Valuation of personal estate	11,577 080
	$50,668 280

Assessed at $16.60 per $1,000 gives	$841,093 45
13,922 polls at $2.00	27,844 00
1 poll (woman) .50	50
School books	27 69
Bank stock (non-residents separately assessed)	4,668 25
Gross tax	$873,633 89

This tax is divided as follows: —

For County assessments	$26,208 53
State assessments	69,540 00
State charge for non-resident bank stock	4,668 25
* City purposes	773,217 11
	$873,633 89

Abatements and Discounts upon Taxes for the past five Years.

Year.	Total Tax.	Total Abatements.	Total Discounts at four per cent.	Amount of tax uncollected Dec. 1, of each year.	Amount uncollected Dec. 1, 1882.
1878	$935,227 04	$26,799 82	$30,061 05	$127,739 86	$7,198 27
1879	869,395 00	30,557 37	29,305 80	95,352 28	8,342 32
1880	826,079 23	17,142 79	28,383 13	72,534 65	8,032 48
1881	850,730 61	12,958 90	30,029 45	68,562 84	12,599 41
1882	873,793 41	12,230 20	30,783 78	64,448 68	64,448 68

* To meet the city expenses the income from various departments is added to this sum thus raised by taxation.

Rates of Taxation in Cambridge for the past ten Years compared with the rates of neighboring Cities for the same Decade. Also the proportions of said rates necessary to pay the Debt, and the proportions requisite to pay the running Expenses.

Cambridge. Population, 52,860.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873 . .	$13 50 per $1,000.		
1874 . .	12 50 per 1,000.		
1875 . .	17 00 per 1,000.		
1876 . .	16 00 per 1,000.		
1877 . .	17 20 per 1,000.		
1878 . .	18 00 per 1,000.	$7 33	$10 67
1879 . .	17 00 per 1,000.	7 38	9 62
1880 . .	16 00 per 1,000.	7 18	8 82
1881 . .	16 00 per 1,000.	6 88	9 12
1882 . .	16 60 per 1,000.	6 88	9 72
10)	$159 80		
Average rate for last ten years,	$15 98		

City of Somerville. Population, 24,964.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873 . .	$12 80 per $1,000.		
1874 . .	15 00 per 1,000.		
1875 . .	16 20 per 1,000.		
1876 . .	18 60 per 1,000.		
1877 . .	18 10 per 1,000.		
1878 . .	19 00 per 1,000.	$6 61	$12 39
1879 . .	18 00 per 1,000.	5 72	12 28
1880 . .	19 10 per 1,000.	5 37	13 73
1881 . .	19 50 per 1,000.	5 23	14 27
1882 . .	17 80 per 1,000.	4 90	12 90
10)	$174 10		
Average rate for last ten years,	$17 41		

City of Chelsea. Population, 21,780.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873	$17 50 per $1,000.		
1874	19 00 per 1,000.		
1875	20 00 per 1,000.		
1876	17 00 per 1,000.		
1877	18 00 per 1,000.		
1878	17 60 per 1,000.	$6 67	$10 83
1879	19 80 per 1,000.	7 23	12 57
1880	19 20 per 1,000.	7 05	12 15
1881	19 00 per 1,000.	7 00	12 00
1882	18 80 per 1,000.	6 44	12 36
10)	$185 90		
Average rate for last ten years,	$18 59		

City of Fall River. Population, 48,626.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873	$13 00 per $1,000.		
1874	12 80 per 1,000.		
1875	14 50 per 1,000.		
1876	15 20 per 1,000.		
1877	15 50 per 1,000.		
1878	17 50 per 1,000.	$3 10	$14 40
1879	18 00 per 1,000.	4 43	13 57
1880	18 00 per 1,000.	3 98	14 02
1881	19 00 per 1,000.	4 15	14 85
1882	18 80 per 1,000.	3 50	15 40
10)	$162 30		
Average rate for last ten years,	$16 23		

City of Lawrence. Populalion, 39,068.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873 . .	$16 00 per $1,000.		
1874 . .	16 20 per 1,000.		
1875 . .	17 60 per 1,000.		
1876 . .	19 00 per 1,000.		
1877 . .	16 60 per 1,000.		
1878 . .	15 00 per 1,000.	$1 66	$13 34
1879 . .	16 40 per 1,000.	2 69	13 71
1880 . .	16 80 per 1,000.	2 92	13 83
1881 . .	16 00 per 1,000.	1 23	14 77
1882 . .	16 60 per 1,000.	2 77	13 83
10)	$166 20		
Average rate for last ten years,	$16 62		

City of Lowell. Population, 59,340.

	Rate.	Proportion required to pay Interest on Debt and Appropriation for Sinking Fund.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873 . .	$16 90 per $1,000.		
1874 . .	15 90 per 1,000.		
1875 . .	16 20 per 1,000.		
1876 . .	12 80 per 1,000.		
1877 . .	14 30 per 1,000.		
1878 . .	13 70 per 1,000.	$2 10	$11 60
1879 . .	13 40 per 1,000.	2 76	10 64
1880 . .	16 20 per 1,000.	2 72	13 48
1881 . .	15 70 per 1,000.	2 08	13 62
1882 . .	15 60 per 1,000.	3 03	12 57
10)	$150 70		
Average rate for last ten years,	$15 07		

CITY OF SPRINGFIELD. POPULATION, 33,536.

	Rate.	Proportion required to pay Interest on Debt.	Proportion required to pay Expenses if the City were free from Debt, excepting Water Debt.
1873 . .	$16 00 per $1,000.		
1874 . .	16 50 per 1,000.		
1875 . .	17 20 per 1,000.	$1 30	$15 90
1876 . .	16 20 per 1,000.	1 70	15 50
1877 . .	13 00 per 1,000.	1 60	11 40
1878 . .	11 00 per 1,000.	1 60	9 40
1879 . .	12 00 per 1,000.	1 50	10 50
1880 . .	13 00 per 1,000.	1 40	11 60
1881 . .	12 50 per 1,000.	1 30	11 20
1882 . .	12 50 per 1,000.		
	10)$139 90		
Average rate for last ten years,	$13 99		

Rate of Tax per $1,000, in some of the largest Cities in the Union.

Providence in 1881	$14 00 per $1,000.
Baltimore in 1881	15 57½ per 1,000.
Boston in 1882	15 10 per 1,000.
Philadelphia in 1881	19 50 per 1,000.
Cincinnati in 1881	22 20 per 1,000.
New York in 1881	26 20 per 1,000.
Chicago in 1881	34 72 per 1,000.

Number of Liquor Licenses granted in Cambridge, from 1875 to 1882 inclusive, and the amounts received for same.

Years.	No. of Licenses.	Amounts Received
1875	208	$25,125 00
1876	155	18,125 00
1877	165	26,475 00
1878	169	22,042 00
1879	127	15,504 00
1880	170	21,375 00
1881	155	19,675 00
1882	105	18,625 00

The Funded City Debt at the Beginning of the Year, exclusive of the Water Debt.

Object for which debt was incurred.	Amount.	Rate of Interest.	Amount paid in 1882.	Amount due in 1883.	Amount due in 1884.
Bridges	$120,000	6 per cent.			$94,000
Building	334,000	6 per cent.		$119,000	198,000
City	334,000	5 per cent.	$84,000		
City	120,000	6 per cent.			
Funding	340,000	6 per cent.		216,000	100,000
Land	10,000	6 per cent.			
Low Land	763,000	6 per cent.	15,000	270,000	296,000
Paving	255,000	6 per cent.			
Sewer	624,000	6 per cent.			
Street	13,000	6 per cent.			
Street widening.....	121,000	6 per cent.			
Total.....	$3,034,000		$99,000	$605,000	$688,000

REPORT

OF

THE CITY TREASURER.

OFFICE OF CITY TREASURER, CAMBRIDGE, Dec. 1, 1882.

To the Honorable the City Council: —

THE undersigned herewith presents the annual report of the transactions of the City Treasury for the year ending Nov. 30, 1882. From the detailed account hereto appended it will be seen that the

Cash balance in the treasury, Nov. 30, 1881, was	$3,285 15
Amount received during the year ending Nov. 30, 1882	1,945,850 01
Total	1,949,135 16
Authorized payments during the year amounted to	1,885,747 29
Leaving a balance in the treasury Nov. 30, 1882, of	$63,387 87

Respectfully submitted,

WM. W. DALLINGER, *City Treasurer.*

City of Cambridge in Account Current from Dec. 1, 1881, to

Dr.

No.	To authorized payments charged to City Accounts as follows: —	
1.	Abatements and Discounts	$43,013 98
2.	Bridges	5,763 07
3.	Bridges (West Boston, Craigie's, and Prison Point)	6,036 99
4.	Cambridge Public Library	6,299 03
5.	Cemeteries	12,673 27
6.	Engineering	6,183 84
7.	Fire Department	54,779 67
8.	Health Department	1,667 50
9.	Incidental Expenses	25,103 89
10.	Interest	197,804 96
11.	Interest on Water Loan	87,457 00
12.	Lighting Streets	21,048 14
13.	Loan, Temporary	525,000 00
14.	Loan, City	86,000 00
15.	Loan, Lowland	15,000 00
16.	Pauper Department	13,630 98
17.	Pauper Department (Almshouse)	21,145 48
18.	Pauper Department (House Offal)	9,104 77
19.	Police Department	56,657 61
20.	Salaries	21,700 00
21.	School Department (Drawing Schools)	700 00
22.	School Department (Incidental Expenses)	1,534 28
23.	School Department (Salaries)	137,328 55
24.	School Department (Text-Books and Stationery)	3,538 41
25.	School-Houses (Care and Repairs)	35,909 01
26.	Sewers (Construction)	20,482 48
27.	Sewers (Maintenance)	10,452 36
28.	Shade Trees and Public Grounds	2,498 26
29.	Sinking Funds	164,865 00
30.	Sinking Fund of Water Works	44,355 00
31.	State Aid	15,733 54
32.	Stationery and Printing	2,884 72
33.	Street Department (Paving)	10,076 72
34.	Street Department (Repairs)	68,481 19
35.	Street Department (Watering)	18,494 97
36.	Surrendered Estates (Care and Repairs)	122 68
37.	Surrendered Estates (Sale Account)	34 44
38.	Tax (National Bank)	5,714 52
39.	Tax, County	26,208 53
40.	Tax, State	52,155 00
41.	Tax Lien Account	61 76
42.	Water Works (Construction)	16,584 06
43.	Water Works (Maintenance)	27,056 85
44.	Water Works (Rates, Fines, etc.)	1,299 02
45.	Water Works (Supplies)	3,105 76
	Total payments	$1,885,747 29
	Cash balance in the treasury, Nov. 29, 1882	63,387 87
		$1,949,135 16

Nov. 29, 1882, with William W. Dallinger, *City Treasurer.*

Cr.

No.	By Cash received and credited to City Accounts as follows: —	
1.	Bills Receivable	$825 00
2.	Bridges	1 00
3.	Bridges (West Boston, Craigie's, and Prison Point)	105 46
4.	Cambridge Public Library	2,494 47
5.	Cemeteries	13,018 30
6.	Cemetery Fund	1,150 00
7.	Engineering	32 50
8.	Fire Department	360 90
9.	Health Department	164 32
10.	Incidental Expenses	24,605 57
11.	Interest	3,358 63
12.	Lighting Streets	40 60
13.	Loan, Temporary	525,000 00
	Loan, Temporary, Payable from Taxes of 1883	100,000 00
14.	Pauper Department	3,637 21
15.	Pauper Department (Almshouse)	3,768 05
16.	Pauper Department (House Offal)	5,705 22
17.	Pike, James	1,081 00
18.	Police Department	5,367 15
19.	School Department (Salaries)	1,010 71
20.	Sewers (Construction)	3,222 81
21.	Sewers (Maintenance)	897 32
22.	Sinking Funds, Commissioners of	99,000 00
23.	State Aid	15,523 07
24.	Street Department (Repairs)	695 40
25.	Street Department (Watering)	9,318 45
26.	Surrendered Estates	36 60
27.	Surrendered Estates (Care and Repairs)	592 42
28.	Surrendered Estates (Sale Account)	3,203 75
29.	Tax (Corporation)	48,721 63
30.	Tax (National Bank)	20,185 19
31.	Taxes, 1878	410 40
32.	Taxes, 1879	508 00
33.	Taxes, 1880	2,482 40
34.	Taxes, 1881	55,982 63
35.	Taxes, 1882	809,344 73
36.	Tax Lien Account	676 52
37.	Water Works (Maintenance)	5 92
38.	Water Works (Rates, Fines, etc.)	179,484 17
39.	Water Works (Supplies)	3,832 51
	Total receipts	$1,945,850 01
	Cash balance in the treasury, Dec. 1, 1881	3,285 15
		$1,949,135 16

WM. W. DALLINGER, *City Treasurer.*

REPORT

OF THE

COMMISSIONERS OF THE SINKING FUNDS OF THE CITY OF CAMBRIDGE.

To the Honorable City Council: —

THE undersigned, Commissioners of the Sinking Funds of the City, in compliance with Sect. 8 of an ordinance passed Dec. 22, 1875, herewith present their seventh annual report, showing the present condition of the funds to be as follows, viz. : —

Amount of the funds Dec. 1, 1881 . . .	$1,356,391 87	
Amount of interest received during the year on investments	71,147 13	
Amount received from the City of Cambridge derived from taxation . . .	164,865 00	
		$1,592,404 00
Amount paid City Treasurer of Cambridge to pay Low-land Loan Bonds due July 1, 1882	$15,000 00	
Amount paid City Treasurer of Cambridge to pay City Loan Bonds, due Aug. 1, 1882	30,000 00	
Amount paid City Treasurer of Cambridge to pay City Loan Bonds, due Sept. 10, 1882	40,000 00	
Amount paid City Treasurer of Cambridge to pay City Loan Bonds, due Nov. 20, 1882	14,000 00	
Amount paid for accrued interest on securities purchased during the year .	864 25	
Amount paid for premium on securities purchased during the year	1,027 30	
		100,891 55
Leaving the amount of the funds Nov. 30, 1882, *all securities taken at par* .		$1,491,512 45

SECURITIES BELONGING TO THE SINKING FUNDS, NOV. 30, 1882.

Cambridge Funding Loan, six per cent bonds, maturing April 1, 1883 . . .	$32,000 00	
Cambridge Low-land Loan, six per cent bonds, maturing July 1, 1883 . . .	136,000 00	
Cambridge Building Loan, six per cent bonds, maturing July 1, 1883 . . .	33,000 00	
Cambridge Water Loan, six per cent bonds, maturing Aug. 1, 1883 . . .	3,800 00	
Cambridge Low-land Loan, six per cent bonds, maturing April 1, 1884 . . .	26,000 00	
Cambridge Building Loan, six per cent bonds, maturing April 1, 1884 . . .	23,000 00	
Cambridge Bridge Loan, six per cent bonds, maturing July 1, 1884 . . .	10,000 00	
Cambridge Funding Loan, six per cent bonds, maturing July 1, 1884 . . .	11,000 00	
Cambridge Low-land Loan, six per cent bonds, maturing Oct. 1, 1884 . . .	2,000 00	
Cambridge Funding Loan, six per cent bonds, maturing July 1, 1885 . . .	24,000 00	
Cambridge Bridge Loan, six per cent bonds, maturing July 1, 1885 . . .	26,000 00	
Cambridge Building Loan, six per cent bonds, maturing July 1, 1885 . . .	17,000 00	
Cambridge Low-land Loan, six per cent bonds, maturing July 1, 1885 . . .	122,000 00	
Cambridge Low-land Loan, six per cent bonds, maturing July 1, 1886 . . .	27,000 00	
Cambridge Street-widening Loan, six per cent bonds, maturing July 1, 1886 .	3,000 00	
Cambridge City Loan, six per cent bonds, maturing July 1, 1886	1,000 00	
Cambridge Low-land Loan, five per cent bonds, maturing Oct. 1, 1887 . . .	120,000 00	
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1896 . . .	11,000 00	
Cambridge Street-widening Loan, six per cent bonds, maturing July 1, 1904 .	90,000 00	
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1904 . . .	2,000 00	
Cambridge Street-widening Loan, six per cent bonds, maturing July 1, 1905 .	14,000 00	
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1905 . . .	49,000 00	
Amount carried forward		$782,800 00

Amount brought forward		$782,800 00
City of Boston five per cent coupon bonds, maturing Jan. 1, 1883	$3,000 00	
Town of Waltham, note bearing four per cent interest, due Jan. 5–8, 1883 . .	2,000 00	
State of Massachusetts five per cent coupon bonds, maturing July 1, 1883 .	5,000 00	
City of Providence five per cent coupon bonds, maturing Sept. 1, 1883 . . .	1,000 00	
City of Charlestown five per cent coupon bonds, maturing Oct. 1, 1883 . . .	2,000 00	
City of Chelsea five and one half per cent coupon bonds, maturing Oct. 15, 1883,	19,000 00	
City of Boston five per cent coupon bonds, maturing Jan. 1, 1884	1,000 00	
Town of Waltham note, bearing four per cent interest, due Jan. 5–8, 1884 . .	2,000 00	
City of Manchester, N. H., six per cent coupon bonds, maturing April 1, 1884,	1,000 00	
Town of Weymouth four per cent bond, maturing April 1, 1884	5,000 00	
City of Boston five per cent registered bonds, maturing July 1, 1884 . . .	1,000 00	
City of Boston five per cent coupon bonds, maturing July 1, 1884	2,000 00	
City of Lynn five and one half per cent coupon bonds, maturing Aug. 15, 1884	4,000 00	
State of Maine four per cent coupon bonds, maturing Aug. 15, 1884 . .	19,000 00	
State of New Hampshire six per cent coupon bonds, maturing Sept. 1, 1884 .	2,000 00	
State of New Hampshire six per cent coupon bonds, maturing Sept. 1, 1884 .	1,000 00	
City of Somerville six and one half per cent coupon bonds, maturing Oct. 1, 1884,	5,000 00	
City of Roxbury six per cent coupon bonds, maturing Nov. 1, 1884 . . .	2,000 00	
Town of Holbrook four per cent bond, maturing Nov. 10, 1884	4,000 00	
Town of Waltham note, bearing four per cent interest, due Jan. 5–8, 1885 . .	2,000 00	
City of Boston five per cent registered bonds, maturing April 1, 1885 . . .	5,000 00	
City of Worcester six per cent coupon bonds, maturing July 1, 1885 . . .	3,000 00	
Amounts carried forward	$91,000 00	$782,800 00

Amounts brought forward	$91,000 00	$782,800 00
State of Maine four per cent coupon bonds, maturing Aug. 15, 1885 . .	19,000 00	
City of Boston five per cent coupon bonds, maturing Jan. 1, 1886 . . .	4,000 00	
Town of Waltham note, bearing four per cent interest, due Jan. 5-8, 1886 . .	2,000 00	
State of Maine four per cent coupon bonds, maturing Aug. 15, 1886 . .	24,000 00	
Town of Waltham note, bearing four per cent interest, due Jan. 5-8, 1887 . .	2,000 00	
City of Boston five per cent coupon bonds, maturing April 1, 1887 . . .	1,000 00	
Town of Woburn five per cent bonds, maturing July 2, 1887.	20,000 00	
City of Somerville five per cent coupon bonds, maturing Oct. 1, 1887 . . .	19,000 00	
Town of Waltham, note bearing four per cent interest, due Jan. 5-8, 1888 . .	2,000 00	
Town of Winchester five per cent coupon bonds, maturing April 1, 1888 . . .	5,000 00	
Town of Waltham note, bearing four per cent interest, due Jan. 5-8, 1889 . .	2,000 00	
Town of Waltham, note bearing four per cent interest, due Jan. 5-8, 1890 . .	2,000 00	
Town of Brookline four and one half per cent coupon bonds, maturing July 1, 1890	19,000 00	
Town of Scituate four per cent bonds, maturing Jan. 1, 1891.	20,000 00	
Town of Waltham note, bearing four per cent, interest, due Jan. 5-8, 1891 . .	2,000 00	
Town of Waltham four per cent coupon bonds, maturing Sept. 1, 1891 . . .	46,000 00	
United States four and one half per cent coupon bonds, maturing after Sept. 1, 1891	57,000 00	
Town of Arlington five per cent coupon bonds, maturing Nov. 1, 1892 . . .	6,000 00	
City of Boston four per cent coupon bonds, maturing Jan. 1, 1899 . . .	50,000 00	
City of Providence four and one half per cent coupon bonds, maturing June 1, 1899	116,000 00	
United States four per cent registered bonds, maturing after July 1, 1907 .	70,000 00	
Amounts carried forward	$579,000 00	$782,800 00

Amounts brought forward	$579,000 00	$782,800 00
United States four per cent coupon bonds, maturing after July 1, 1907 .	300 00	
United States three and one half per cent registered bonds, maturing at pleasure of the government	11,000 00	
City of Cambridge (gravel), note bearing no interest, maturing July 1, 1883 .	2,717 46	
City of Cambridge (gravel), note bearing no interest, maturing July 1, 1884 .	2,717 46	
Cash on deposit and drawing interest in the First National Bank of Cambridge	112,977 53	
		708,712 45
		$1,491,512 45

RECAPITULATION.

Town, State, and Government bonds bearing six and one half per cent interest.	$5,000 00	
Town, State, and Government bonds bearing six per cent interest . . .	671,800 00	
Town, State, and Government bonds bearing five and one half per cent interest.	23,000 00	
Town, State, and Government bonds bearing five per cent interest . . .	195,000 00	
Town, State, and Government bonds bearing four and one half per cent interest	192,000 00	
Town, State, and Government bonds bearing four per cent interest . . .	275,300 00	
Town, State, and Government bonds bearing three and one half per cent interest	11,000 00	
Funds bearing three and one half per cent interest	112,977 53	
Cambridge (gravel) notes bearing no interest	5,434 92	
		$1,491,512 45

The bonded city debt which the foregoing sinking funds are expected to pay matures as follows, viz. : —

April 1, 1883, Funding Loan Bonds	$216,000 00
July 1, 1883, Building Loan Bonds	119,000 00
July 1, 1883, Low-land Loan Bonds	270,000 00
April 1, 1884, Building Loan Bonds	198,000 00
April 1, 1884, Low-land Loan Bonds	240,000 00
July 1, 1884, Bridge Loan Bonds	94,000 00
July 1, 1884, Funding Loan Bonds	100,000 00
Oct. 1, 1884, Low-land Loan Bonds	56,000 00
July 1, 1885, Bridge Loan Bonds	26,000 00
July 1, 1885, Building Loan Bonds	17,000 00
July 1, 1885, Funding Loan Bonds	24,000 00
July 1, 1885, Low-land Loan Bonds	122,000 00
July 1, 1886, City Loan Bonds	100,000 00
July 1, 1886, Low-land Loan Bonds	60,000 00
July 1, 1886, Street-widening Loan Bonds	7,000 00
Oct. 1, 1887, Low-land Loan Bonds	120,000 00
April 1, 1889, City Loan Bonds	100,000 00
July 1, 1890, City Loan Bonds	20,000 00
Jan. 1, 1893, City Loan Bonds	150,000 00
July 1, 1893, Land Loan Bonds	10,000 00
July 1, 1893, Paving Loan Bonds	100,000 00
July 1, 1893, Street Loan Bonds	13,000 00
July 1, 1894, Paving Loan Bonds	130,000 00
July 1, 1895, Paving Loan Bonds	25,000 00
Oct. 1, 1895, Sewer Loan Bonds	20,000 00
July 1, 1896, Sewer Loan Bonds	29,000 00
July 1, 1903, Sewer Loan Bonds	136,000 00
July 1, 1903, Street-widening Loan Bonds	10,000 00
July 1, 1904, Sewer Loan Bonds	295,000 00
July 1, 1904, Street-widening Loan Bonds	90,000 00
July 1, 1905, Sewer Loan Bonds	144,000 00
July 1, 1905, Street-widening Loan Bonds	14,000 00
	$3,055,000 00

The funds have now nearly reached their maximum, and the debt for the redemption of which they were created will soon begin to mature rapidly. During the year, $99,000 of city bonds have been paid, and, notwithstanding this, the funds have increased $135,120.58, leaving the present amount of assets $1,491,512.45. The funded city debt is now $3,055,000; this, after deducting the above amount of funds,

leaves the actual funded indebtedness (exclusive of the water debt, Dec. 1, 1882), $1,563,487.55. The advantage of a sinking fund is seen from the fact, that already within the past six years $381,000 of the city debt have been paid, besides which the funds have increased during this period nearly a million of dollars. Bonds of the city will mature in 1883 to the amount of $605,000; in 1884, $688,000; in 1885, $189,000; in 1886, $167,000; in 1887, $120,000; and in 1889, $100,000; and it is a matter for congratulation that all these amounts ($1,869,000) will be met promptly from these funds at maturity, without necessitating any increase in the rate of taxation, and that after 1883 a reduction in the rate may reasonably be expected.

The average rate of interest which the funds are now earning is 5.07.

Respectfully submitted,

CHAS. H. SAUNDERS,
ROBT. DOUGLASS,
JOS. A. HOLMES,
FRANK A. ALLEN,
JOHN M. TYLER,

Commissioners of the Sinking Funds of the City of Cambridge.

REPORT

OF THE.

TRUSTEES OF THE SINKING FUND OF THE CAMBRIDGE WATER WORKS.

To the Honorable the City Council: —

THE undersigned, Trustees of the Sinking Fund of the Cambridge Water Works, herewith submit the annual report of the fund committed by ordinance to their charge.

The amount of the fund Dec. 1, 1881, was	$427,630 31	
There has been received during the year, interest on investments amounting to	22,899 00	
There has been received from the city of Cambridge three per cent on the amount of outstanding water bonds, viz.	44,355 00	
		$494,884 31
Amount paid for accrued interest on securities purchased for investment . . .	$769 00	
Amount paid as premium on securities purchased for investment	10,977 50	
		11,746 50
Leaving the amount of the fund, Nov. 30, 1882, all securities at par		$483,137 81

The following is a list of the securities belonging to the fund: —

Cambridge Low-land Loan, six per cent coupon bonds, maturing July 1, 1883,	$1,000 00
Cambridge Water Loan, six per cent coupon bonds, maturing Aug. 1, 1883,	1,400 00
Cambridge Low-land Loan, six per cent coupon bonds, maturing April 1, 1884	3,000 00
Amount carried forward	$5,400 00

Amount brought forward	$5,400 00	
Cambridge Water Loan, six per cent coupon bonds, maturing April 1, 1887,	6,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing April 1, 1888,	25,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing May 1, 1889,	8,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing July 1, 1890,	31,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing May 1, 1891,	26,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing July 1, 1892,	1,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing April 1, 1895	37,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing July 1, 1896 .	46,000 00	
Cambridge Water Loan, six per cent coupon bonds, maturing July 1, 1897,	16,000 00	
Cambridge Water Loan, five per cent registered bonds, maturing July 1, 1898	12,500 00	
		$213,900 00
State of Connecticut six per cent coupon bond, maturing Jan. 1, 1883 . . .	$1,000 00	
City of Providence five per cent registered bonds, maturing Sept. 1, 1883 . . .	5,000 00	
City of Charlestown five per cent coupon bonds, maturing Oct. 1, 1883 . . .	1,000 00	
City of Boston five per cent coupon bonds, maturing April 1, 1885 . . .	8,000 00	
City of Boston five per cent coupon bonds, maturing Jan. 1, 1886	1,000 00	
City of Burlington, Vt., six per cent coupon bonds, maturing July 1, 1886 .	500 00	
City of New Bedford four per cent coupon bonds, maturing Oct. 1, 1889 . .	8,000 00	
City of Gloucester four and one half per cent coupon bond, maturing July 1, 1890	5,000 00	
Town of Norwalk, Conn., four per cent coupon bond, maturing at pleasure of town after Jan 1, 1891	20,000 00	
Town of Hyde Park four per cent bond maturing July 1, 1891	5,000 00	
Amounts carried forward	$54,500 00	$213,900 00

Amounts brought forward	$54,500 00	$213,900 00
City of Salem four per cent coupon bonds, maturing July 1, 1892.	17,000 00	
Town of Stoughton four per cent coupon bond, maturing Aug. 10, 1893 . . .	2,000 00	
Town of Hopkinton four per cent coupon bonds, maturing Oct. 1, 1894 . . .	5,000 00	
City of Fall River four per cent coupon bonds, maturing May 11, 1895 . . .	9,000 00	
Town of Stoughton four per cent coupon bond, maturing Aug. 10, 1895 . . .	2,000 00	
City of Fall River five per cent coupon bonds, maturing May 1, 1898 . . .	2,000 00	
Town of Arlington five per cent coupon bonds, maturing July 1, 1898 . . .	30,000 00	
Town of Pawtucket, R. I., five per cent coupon bonds, maturing April 1, 1899,	25,000 00	
City of Providence four and one half per cent coupon bonds, maturing June 1, 1899	3,000 00	
City of Boston four per cent registered bond, maturing April 1, 1900 . . .	4,000 00	
City of Fall River four per cent coupon bonds, maturing Aug. 1, 1900 . . .	13,000 00	
City of Providence five per cent registered bonds, maturing July 1, 1906 . . .	50,000 00	
United States four per cent coupon bonds, maturing after July 1, 1907	37,500 00	
Town of Winchester four per cent coupon bonds, maturing May 1, 1908 . . .	10,000 00	
Town of Beverly four per cent coupon bonds, maturing July 1, 1911 . . .	5,000 00	
		269,000 00
Cash balance in First National Bank, Cambridge		237 81
		$483,137 81

RECAPITULATION.

Town, State, and Government bonds bearing six per cent interest	$202,900 00
Town, State, and Government bonds bearing five per cent interest.	134,500 00
Town, State, and Government bonds bearing four and one half per cent interest	8,000 00
Amount carried forward	$345,400 00

Amount brought forward	$345,400 00	
Town, State, and Government bonds bearing four per cent interest	137,500 00	
Cash balance in First National Bank, Cambridge	237 81	
		$483,137 81

No portion of our funded water debt has matured during the year, consequently the fund shows a material increase, viz., $55,507.50. During the coming year $55,000 of our bonds will mature and be paid from our income, without reducing the principal of the fund. The fund as at present constituted is earning an average rate of 5.12 per cent; this average will however be reduced from year to year, unless the market rate now to be obtained on prime investments should advance. The Trustees of this fund have recently made a communication to the City Council with reference to various sums of money which for a series of years have been paid into the City Treasury instead of being paid, as the statute directs, into this fund. These sums referred to represent the excess of receipts over expenditures in the management of the Water Works. It is expected that when the City Auditor shall have verified the amount now due this fund, some definite action will be taken by the City Council in acknowledgment of the debt.

JAMES A. FOX,
GEO. H. HOWARD,
WM. W. DALLINGER,
Trustees of the Sinking Fund of the Cambridge Water Works.

REPORT

OF THE

JOINT STANDING COMMITTEE ON PUBLIC PROPERTY.

A careful retrospect of the labors of your committee during the past year shows a large increase in the demand upon the time and attention of its members, over that of previous years. The constant growth of our city must add greatly, from year to year, to the expenditures in all departments, and especially in those in charge of this committee.

Many of our public buildings being constructed of wood, and erected in years long past, their preservation requires a continual outlay for repairs, and a sharp watch on the part of their custodians, to prevent a rapid waste and decay. The call for additional facilities in the School Department, made during the year 1881, was only partially met by the building of a primary school-house in Ward Three. The house was scarcely completed and occupied before it became apparent that another was needed in that part of Ward Four known as the Franklin Street district. Proposals for the construction of the latter were already received prior to the close of the year 1881, although no award was made until the month of January, 1882, and the cost of the building was subsequently provided for in the appropriations for the year.

In the management of such portions of the various appropriations as were under its control, it is hardly necessary to say that your committee has sought to exercise extreme care, and has made the strictest scrutiny into every matter of projected improvement or repairs upon the buildings in its charge. No expense has been incurred that could be avoided, while at the

same time the property of the city has not been allowed to suffer waste at the hands of the committee.

The different appropriations, wholly or in part under the control of this committee, and to which bills approved by it are chargeable, are as follows: —

Fire Department, repairs in and upon engine houses; Incidental Expenses, including repairs upon the City Hall, and other public buildings used for city purposes; care of clocks and ringing bells, repairs upon hay scales, flag-staffs, etc.; Police Department, repairs upon stations; School-houses, care and repairs, *not* including fuel; Pauper Department (almshouse), repairs upon the almshouse building; and Surrendered Estates, care and repairs. Of its stewardship of these manifold trusts, your committee submits the hereinafter-given details.

The amount of bills approved by this committee, from Nov. 1, 1881, to Dec. 1, 1882, is as follows: —

Appropriations.

Fire Department, repairs upon engine houses		$934 46
Incidental Expenses:		
Care and repairs city buildings	$7,371 37	
Care of clocks and bell ringing	311 00	
Miscellaneous bills	117 48	
		8,799 85
Police Department, repairs at stations		330 95
School-houses, care and repairs		29,680 70
Almshouse, repairs on roof		93 93
Surrendered Estates, care and repairs		122 68
		$39,962 57

For reasons explained in the annual report of the Auditor of Accounts, the above figures represent expenses incurred during a period of *thirteen* months, embracing the period from November, 1881, to November, 1882, inclusive.

The item of $29,680.70, for care and repairs of school-houses as above given, does not include the cost of fuel, which amounts to the sum of $7,347.01 in addition, making the total expense for school-houses, for the period named, $37,027.71. Special mention of the various divisions of committee work may be made as follows: —

Fire Department.

All the repairs made upon the several engine houses have been carried forward in connection with the Committee on Fire Department. With the advice and co-operation of the Chief Engineer, new stall floors, long needed, were put in engine house No. 5 in Inman Square, and repairs were made upon truck house No. 2, on Cambridge Street, corner Portland.

City Buildings.

The care of the two large buildings in Wards One and Four is attended by a large expense, as appears by the figures given. Nearly every portion of both these buildings is occupied for city purposes. The city building, Brattle Square, has upon the first floor, Hook and Ladder Truck No. 1, Engine No. 1, and Police Station No. 1. In the upper stories are the District Court room, accommodations for a primary school, the ward-room, sleeping-rooms for the firemen, hall and parlor used by the Hook and Ladder and Steamer companies, the armory used by the military company of the ward, and the telegraphic fire-alarm battery. The city building on Western Avenue, Ward Four, is occupied on the first floor by the Fire and Police Departments, and the upper stories are variously used for the purposes of the Overseers of the Poor, Lamp, Fire, and School Departments, and there is also an armory for the local military company. A janitor is employed in each of these buildings, his duties requiring his constant presence.

The care and repairs of the City Hall call for increasing expenditure on account of the extreme wear to which the building is subjected. It is believed to be generally in good condition, and it is hoped that the building may serve for its present purposes for many years to come.

School-Houses.

Proposals for an additional primary school-house in Ward Four were received in December, 1881, and were referred to this committee. The matter was considered in the month of January, 1882, and a lot of land bounded on Howard, Grigg, and Magee Streets was selected for a site. The lot contains an

area of 19,500 square feet, and was a portion of the surrendered lands in the Franklin Street district. The award for construction was subsequently made to David W. Power, who completed the building in a satisfactory manner, and the same was accepted by the committee, Aug. 31.

The entire cost of this school-house and land may be placed as follows: —

Lot of land, 19,500 square feet, valued at	$3,900 00
School-house complete	11,466 43
Total	$15,366 43

The work upon this building is of the best character, and the entire structure exceedingly creditable to the contractor.

The appropriation for care and repairs of school-houses was necessarily larger in 1882 than in preceding years, and the needs of this department have been so pressing that the amount set apart for its expenses was barely sufficient.

The amount appropriated for twelve months was	$34,500 00
Amount transferred to appropriation Nov. 1	1,409 01
Appropriated for the month of November	1,118 70
Total	$37,027 71

Amount expended: —

New school-house in Ward Four	$11,466 43	
Furnishing school-house in Ward Four	613 30	
General care and repairs school-houses	24,947 18	
		$37,027 71

The gross amount of expenses chargeable to this department during the twelve months ending Oct. 31, 1882, is in excess of that of the preceding year in the sum of $2,008.97, exclusive of the cost of the primary school-houses built in each year. The expenses during November, 1882, which are included in this financial year, make the total increase as follows: —

Amount from Nov. 1, 1881, to Nov. 1, 1882	$2,008 97
Amount from Nov. 1, 1882, to Dec. 1, 1882	1,019 71
Total excess	$3,028 68

The items charged to this appropriation within the thirteen months included above may be classified as follows: —

Blackboards		$81 06
Fuel		7,347 01
Furniture and repairs		871 66
Gas		166 58
Gravel and grading land, Charles Street		353 81
Hardware and tools		213 45
Heating apparatus and repairs		1,426 22
Janitors		8,957 45
Repairs upon buildings		4,641 44
Supplies, miscellaneous		254 84
Sundry expenses		28 60
Water rates		605 86
		$24,947 98
New school-house	$11,466 43	
Furnishing school-house	613 30	
		12,079 73
		$37,027 71

The ordinary expenses of this department, not including new buildings, by the foregoing exhibit appear to have been: —

Nov. 1, 1881, to Dec. 1, 1882	$24,947 98
Nov. 1, 1880, to Nov. 1, 1881	21,919 30
Increase in 1882	$3,028 68

There was also a far greater expense attending the construction of the school-house built in 1882 than was required by the building finished the previous year. The land required considerable filling, and, owing to its marshy character, it was necessary to drive a foundation of piles.

While your committee does not deem it necessary to apologize for or explain the increasing cost of the care and repairs of school-houses, it may be said that it is no light responsibility which is involved in the regulation of these numerous buildings, as regards heating, drainage, and ventilation alone. A due regard for the health of the nearly ten thousand pupils who daily attend our public schools requires a constant vigilance to prevent even a cause for disease to exist within the walls of the school-houses. The committee has spared no outlay that was imperative, looking always to the interests of the tax-payers in making its contracts.

Almshouse.

The committee has been called upon to make some slight repairs upon the roof of the almshouse building during the year, the amount expended being a part of the appropriation for the Pauper Department.

A reference to action by the City Council, in relation to a portion of the almshouse lands, may be found elsewhere in this report.

Public Lands.

No attempt has been made to dispose of any of the city lands in charge of this committee.

By a vote of the City Council, authority was given to the committee to place upon the market about 250,000 feet of the almshouse land, the same having a frontage of 625 feet on Broadway, Somerville, and extending westerly 400 feet. A plan of this land, showing proposed streets, has been prepared by the City Engineer. Until sales are made, the land will be continued in use for almshouse purposes.

Surrendered Estates.

Sales of portions of this property have been made from time to time during the year. That which remains unsold is mostly vacant land, much of it being in desirable localities, and it will doubtless soon be in demand for building purposes.

The amount of sales is as follows: —

Cash received	$3,203 75
Mortgages at six per cent	4,653 50
Total	$7,857 25

The schedule hereinafter given shows the number and location of the estates still in possession of the city.

The receipts for rent in 1882 were	$592 42
The expenses were	122 68
Excess of receipts over expenses	$469 74

Mill Pond Property.

The estate known by the above designation has required but little care. The old mill on River Street is let for a small rental,

and the ashes collected in Ward Four by the Street Department have been deposited upon the northerly portion of what was formerly the mill-pond basin. The process of filling this basin is going on rapidly, and the nuisance formerly complained of, occasioned by stagnant water, has been in great measure abated.

The total area of these lands is 319,000 square feet, or $7\frac{32}{100}$ acres.

Tax-Title Estates.

Mention was made in the report of this committee, for the preceding year, of the estates classed under the above heading. There are now seven of these estates in possession of the city, and these are not likely to be redeemed by their former owners, the city claim upon them being for nearly their full value. One piece of this class of property has been let for the past year for a nominal rent. There seems to be no good reason why all these estates should not be disposed of for the benefit of the City Treasury.

Janitors of School-Houses and Public Buildings.

These officers are under charge of this committee and receive their appointment at its hands. Although it has been desired by the School Committee that the appointment of school janitors should be transferred to that board, it is nevertheless the opinion of your committee that the interests of the city are better served under the present arrangement than they would be if the wishes of the School Board in this respect were gratified. The regulations in force, in relation to the duties of janitors of school-houses, subject them to the control of the Superintendent of Schools and the teachers, and a monthly report is made to the Superintendent by the latter, of the manner in which the janitors' work is done. All complaints of neglect of duty reach this committee and are promptly attended to. It is a gratifying fact that such complaints are infrequent, and our janitors are, as a whole, a faithful class of public servants.

THE FOLLOWING IS A SCHEDULE OF PROPERTY

Owned by the city at the close of the year 1882, all of which is under the charge of this committee, except such as is specially noted : —

Almshouse Building.

Foot of Tannery Street, Ward Five, with $14\frac{2\,4\,2}{1\,0\,0\,0}$ acres of land in Cambridge, $22\frac{5}{1\,0\,0\,0}$ acres of land in Somerville, and $\frac{1}{1\,0}$ acre in Arlington. Total area, $36\frac{1}{8}$ acres. Also stone ledge located on almshouse land. (In charge of Board of Overseers of the Poor.) N. B. A part of this land, situated in Somerville, is for sale, and is mentioned elsewhere in this schedule, under *City Lands* (*Salable*).

Cemeteries.

Cambridge Cemetery. Foot of Coolidge Avenue, containing $40\frac{8\,1\,2\,9}{1\,0\,0\,0\,0}$ acres of land. (In charge of Board of Commissioners of Cambridge Cemetery. Included in their report.)

Burial Ground. Garden Street, junction of North Avenue, containing 85,858 square feet of land.

City Buildings.

Ward One Building, Brattle Square, and land, 16,153 square feet.

Central Square Building, junction Western Avenue and Green Street, and 13,028 square feet of land.

City Hall, Main Street, corner Pleasant Street, and 10,181 square feet of land.

City Stables, Norfolk, Hampshire, and Tremont Streets, and 72,661 square feet of land. (In charge of Committee on Roads and Bridges.)

Police Station, Norfolk Street, on City Stable lot.

City Lands (Salable).

Lot on Franklin, Auburn, and Sydney Streets, containing 79,920 square feet.

Lot on Auburn, Pilgrim, and Sydney Streets, containing 85,160 square feet, with house and shed thereon, owned by Water Works. (Leased to Cambridge Water Works.)

Lot on Columbia Street, adjoining Gannett School-house lot, southerly, containing 18,870 square feet.

Lot on Sydney Street, east side, near Auburn Street, containing 26,172 square feet.

Lot on Cambridge, corner Portland Street, containing 111,697 square feet.

Lot on Broadway, West Somerville, part of Cambridge almshouse land, containing 250,000 square feet (also included in the area of almshouse lands).

City Flats.

Flats, opposite City Wharf, Main Street, south side, opposite junction with Harvard Street, in all 162,379 square feet.

Commons and Public Squares.

Cambridge Common. Garden Street, North Avenue, and Waterhouse Streets. Area 370,785 square feet.

Public Square. Between Waterhouse Street and North Avenue. Area 13,180$\frac{7}{10}$ square feet.

Arsenal Square. Garden and Chauncy Streets and Concord Avenue. Area 3,189 square feet.

Public Square. Between Waterhouse Street and Garden Street. Contents 363 square feet.

Public Square. Between Holmes Place and Cambridge Street. Contents 20,956 square feet.

Public Square. North Avenue, corner of Kirkland Street, on south corner. Contents 23,074 square feet.

Public Square. North Avenue, corner of Kirkland Street, on north corner. Contents 33,357 square feet.

Public Square. Junction of Arrow and Main Streets, containing 872 square feet.

Public Square. Junction of Hampshire Street and Broadway, containing 614 square feet.

Broadway Park. Broadway, corner of Norfolk Street. Contents 107,181 square feet.

Fort Washington. Waverley Street. Contents 42,123 square feet.

Common. Junction of Pleasant and River Streets. Contents 1,569 square feet.

Hastings Square. Brookline, Chestnut, and Henry Streets. Area 29,999 square feet.

Dana Square. Lake, Magazine, Lawrence, and Niagara Streets. Area 33,531 square feet.

Winthrop Square. Brighton, Winthrop, and Mount Auburn Streets. Area 10,236 square feet.

Tudor Park. Between Fresh Pond Drive and Watertown Branch Railroad, containing 53,032$\frac{2}{10}$ square feet.

Engine Houses.

House No. 1, Eliot Square, corner Mount Auburn Street, included with Ward One Building.

House No. 2, Main Street, near Winsor, and land, 3,150 square feet.

House No. 3, Gore and Fourth Streets, and land, 4,220 square feet.

House No. 4, North Avenue, near corner Russell Street, and land, 6,315 square feet.

House No. 5, Hampshire Street, corner Inman, and land, 6,000 square feet.

House, Old, junction Western Avenue and River Street, and land, 1,943$\frac{1}{2}$ square feet. (Leased as a carpenter's shop.)

House, Hook and Ladder No. 2, Cambridge, corner of Portland Street, land included in city lands.

Gravel Pits.

Gravel Pit, on Concord Avenue, containing 397,417$\frac{7}{10}$ square feet. (In charge of Committee on Roads and Bridges.)

Gravel Pit, in Watertown, containing 109,464$\frac{9}{10}$ square feet. (In charge of Committee on Roads and Bridges.) The gravel only is owned by the city.

Mill Pond Property.

Old Mill. River Street, near Brighton Bridge, and upper and lower basins on River Street, Putnam and Western Avenues, comprising an area of 319,000 square feet, or 7$\frac{32}{100}$ acres of land.

School-Houses.

Allston, Boardman Street, 15,193 feet of land.

Agassiz, Oxford Street, corner Sacramento Street, 19,689 feet of land.

Boardman, Winsor Street, corner School Street, 10,018 feet of land.

Bridge, Pioneer Street, Lower Port, 4,646 feet of land.

Corlett, Holworthy Street, and 10,000 feet of land.

Cushing, Cushing Street, nearly opposite Locust Street, 14,788 feet of land.

Dunster, Concord Avenue, near Sparks Street, and 10,000 feet of land.

Dana, Centre Street, and 14,317 feet of land.

Felton, Amory Street, corner Summer Street, and 15,090 feet of land.

Gore, Gore Street, between Third and Fourth Streets, and 9,900 feet of land.

Gannett, Columbia Street, between Lincoln and Cambridge Streets, and $8,802\frac{7}{10}$ feet of land.

Harvard (Grammar), Broadway, corner Inman Street, and 20,494 feet of land.

Harvard (Primary), Harvard Street, near Prospect Street, and 10,050 feet of land.

High School, Fayette Street, Antrim Street, and Broadway, and 37,828 feet of land.

Holmes, Hilliard Street, and 11,182 feet of land.

Lassell, Charles Street, near Sixth, and 10,000 square feet of land.

Mason, Front Street, corner Jennings Street, and 10,000 feet of land.

Otis, Otis Street, between Fifth and Sixth Streets, and 8,270 feet of land.

Putnam, Otis Street, corner Fourth Street, and 10,000 feet of land.

Quincy, Mason Street, corner James Street, and $8,469\frac{3}{10}$ feet of land.

Reed, Reed Street, Ward Five, and 12,000 feet of land.

Riverside, Putnam Avenue, Ward One, and 11,198 feet of land.

Sargent, Broadway, corner Winsor Street, and 9,995 feet of land.

Shepard, North Avenue, near Russell Street, and 14,755 feet of land.

Tarbell, Grigg, Howard, and Magee Streets, and 19,500 feet of land.

Thorndike, Thorndike Street, corner Sixth Street, and 10,027 feet of land.

Willard, Lake, Lawrence, and Niagara Streets, and 20,079 feet of land.

Webster, Upton Street, and 25,839 feet of land.

Wyman, Spruce Street, corner Groveland Street, and 14,346$\frac{8}{10}$ feet of land.

Washington, Brattle Street, corner Farwell Place, and 14,951$\frac{1}{2}$ feet of land.

Surrendered Estates.

These estates were surrendered to the city under the provisions of the statutes relating to low-land filling.

This list gives by whom surrendered, and location of property.

CAMBRIDGE STREET DISTRICT.

Langley, Samuel. Hunting and Harding Streets. 1,676 feet of land on Hunting Street.

Madden, D. & H. A. Willow and Harding Streets. House and 6,063 feet of land.

Nourse, Susan M. Porter and Jefferson Streets. Lot of land, 7,756 feet, Porter Street; lot of land, 11,202 feet, Porter and Jefferson Streets.

Rafferty, B. Cambridge and Jefferson Streets. Old building, and 24,934 feet of land.

MILLER'S RIVER DISTRICT.

Callahan, Mary. Rear of Winter Street. Lot of land containing 4,004 feet.

Dale, Thomas J. Rear of Winter Street. Three old buildings and 5,220 feet of land.

Moulton, H. & C. W. H. Rear of Gore Street. Lot of land containing 7,800 feet.

Tibbetts, Israel. Bridge Street. Lot of land containing 3,765 feet.

COWPERTHWAITE STREET DISTRICT.

Crane, Ann, Heirs of. Grant Street and DeWolf Street. Lot of land containing 16,353 feet.

Kneeland, Henry. Grant Street. Lot of land, 4,000 feet.

Winthrop, William, Heirs of. Athens Place. Lot of land, west side, 6,750 feet; lot of land, east side, 17,860 feet.

WASHINGTON STREET DISTRICT, SOUTH DOCK AND SOUTH CANAL.

Bent Heirs. Dock and Sixth Streets; east lot containing 5,224 feet; west lot containing 5,959 feet; rear lot containing 32,060 feet.

Hunt, Fanny E. Harvard Street, north side, easterly of the estate of Bridget Manning; lot containing 6,966 feet.

FRANKLIN STREET DISTRICT.

Biggin, John. Franklin Street. Lot of land containing 3,004 feet.

Daily, Cornelius. Hancock Street, near Green. 3,467 feet of land.

Drinan, Maurice. Kinnaird Street. Lot of land, about 3,927 feet.

Halloran, Mrs. Mary. 249 Franklin Street. Lot of land, 3,084 feet.

Johnston, Thomas A. Green Street. Lot of land, 4,860½ feet.

Kelley & McKinnon. Howard Street. Two lots of land, 7,200 feet.

Lonergan, Michael. Howard Street. Lot of land, 3,600 feet.

Murdock, Heirs of Hannah S. Land as per their plan. Western Avenue, new street from Western Avenue to Hews Street, lots 1 to 4, and 6 to 45, inclusive, containing 47,884 feet; Franklin Street, lots Nos. 13, 14, 15, containing 11,500 feet; Kinnaird Street, lots part of 16, 18, 19, 20, and 21, containing 22,240 feet; Jay and Kinnaird Streets, lot 27 and about one half of lot 26, contents 2,830 feet. Total area, 84,454 feet.

Murdock, Walter H. and Mary L. Land as per their plan. Magee, Hayes, and Grigg Streets. Lots 16 to 26 inclusive (about one half of latter lot); lots 29 to 45 inclusive, — in all 71,173 feet.

Read, J. Stacey. Franklin Street. Lot of land containing 16,128 feet; lot of land containing 3,833½ feet. Kinnaird Street, lot of land containing 17,646 feet. Howard and Kinnaird Streets, lot of land containing 8,174 feet. Total, 45,781½ feet.

Thresher, J. M. Jay Street, westerly side, lots 28 to 37 inclusive, containing 38,313 square feet; Howard and Kinnaird Streets, easterly side, lots 38 to 46 inclusive, 32,454 feet; westerly side Howard and southerly side Kinnaird Street, lots 58 to 63 inclusive, 20,383 feet; part of two corner lots on westerly side of Grigg Street, as per new plan, near Western Avenue, 19,285 feet. Total, 110,436 feet.

TAX-TITLE ESTATES (SALABLE).

The following described estates were conveyed to the city by persons who had purchased them at auction sales by the Collector of Taxes, and the city has taken legal possession of the same.

Lot on Harvard Street, east of land formerly of T. H. Smith, near Boston and Albany Branch Railroad, containing 7,020 feet.

Lot on Broadway, west corner of Sixth Street, containing 17,517 feet.

Lot on Second Street, east of Conlan's Court, containing 26,400 feet.

Lot on Gore Street, in rear of land of Badger, containing 17,065 feet.

Lot on Hunting Street, west side, adjoining land late of Melley, containing 2,709 feet.

Lot on Spruce Street, near railroad, adjoining land of McSweeney, area undetermined.

Lot on Walden Street, southeast of land of Bond, southwest of land formerly of Saunders, area undetermined.

WHARVES AND LANDINGS.

Public Landing, foot of Bath Street, area unknown. *Public Landing*, south of Mount Auburn Street, area unknown. Each has a frontage of 30 feet on the river.

City Wharf, Main Street, opposite Harvard Street, 13,680 feet.

WATER-WORKS PROPERTY.

Old Engine-House Lot, foot of Lake View Avenue, about 33,568 feet of land.

New Engine House, opposite foot of Lexington Avenue, and 90,414 feet of land.

Fresh Pond, lands bordering on, area unknown.

Little Pond, lands bordering on, area unknown.

Reservoir, Reservoir Street, corner High Street, and 86,920 feet of land. All the Water Works property is in charge of the Cambridge Water Board.

Recapitulation of Areas.

Kind of property.	Square feet.	Acres.
Almhouse lands	1,583,289.4	36.347
Cambridge Cemetery	1,778,511.24	40.829
Burial Ground, Ward One	85,858	
Occupied by City Buildings	112,023	
Salable City Lands	321,819	
City Flats	162,379	3.73
Commons and Public Squares	744,061.9	17.008
Occupied by Engine Houses	21,628.5	
Gravel Pit on Concord Avenue	397,417.7	9.125
Gravel Pit in Watertown	109,464.9	2.51
Mill Pond Lands	319,000	
Occupied by School-Houses	411,428.5	

Surrendered estates, lands: —

	Square feet.	
Cambridge Street District	51,631	
Miller's River District	20,789	
Cowperthwaite Street District	44,963	
Washington Street District	50,209	
Franklin Street District	340,987	
Total in all the districts	508,579	
Tax-Title Estates, Five Estates	70,711	
Occupied by Water Works	210,902	
City Wharf Land	13,680	
Total	6,850,753.14	157.27

Schedule

Of salable city lands, included elsewhere in this report, with their appraisal, as made by the Committee on Public Property in this and former years: —

Lot on Franklin, Auburn, and Sydney Streets, 79,920 feet	$19,800 00
Lot on Auburn, Pilgrim, and Sydney Streets, 79,610 feet	17,032 00
Lot on Sydney Street, east side, near Auburn Street, 26,172 feet	3,925 80
Lot on Cambridge, corner Portland Street, 111,697 feet	39,093 95
Flats opposite City Wharf, Lower Port, 162,379 feet	8,118 90
Mill Pond Property	10,000 00
Total, as appraised	$97,970 65
Surrendered estates	114,906 18
	$212,876 83

Salable almshouse lands, 250,000 feet, unappraised.

Below is given a recent appraisal in detail of all the property mentioned in the foregoing list, except such as is in charge of the Cambridge Water Board, the aggregates being as follows: —

City Buildings, Land, and Furniture	$262,347 50
School-Houses, Land, and Furniture	610,388 98
Salable City Land	97,970 65
Surrendered Estates	114,906 18
Almshouse and Land	45,000 00
Wharf at Lower Port	7,000 00
Gravel Pit in Cambridge	4,000 00
Gravel Pit in Watertown	13,587 30
Personal property used in connection with Public Squares, including trees on hand	600 00
Total	$1,155,800 61

Respectfully submitted,

EDWARD T. NICHOLS,
MICHAEL CORCORAN,
JOHN CLARY,
GEO. C. BENT,
JAMES H. WELLS.

Committee on Public Property.

ANNUAL REPORT

OF

THE BOARD OF HEALTH.

DECEMBER 31, 1882.

To the Honorable City Council: —

THE following is a statement of the receipts and expenditures of this department from Nov. 1, 1881, to Nov. 30, 1882, inclusive: —

Amount appropriated	$2,000 00
Additional appropriation for amount of bills approved in November	128 34
	$2,128 34

Expenditures.

Advertising	$1 35	
Analyses of water and meat	30 00	
Bedding destroyed	6 00	
Board of small-pox patients	81 12	
Burying animals	11 50	
Car tickets	40 00	
Directory	2 50	
Disinfectants	35 42	
Horse and wagon, use of	4 00	
Medicines	4 22	
Salary of clerk of board, 13 months	160 50	
Salary of health officer, 13 months	1,083 34	
Stationery, printing, and maps	43 39	
Vaccinations	290 50	
Total		1,795 84
Balance unexpended		$332 50

Of the above-named sum of	$2,128 34	
There was received from the Commonwealth,	164 32	
Making the net appropriation	$1,964 02	

The foregoing figures represent receipts and expenses for a period of thirteen months.

By direction of the Board of Health,

JOHN McDUFFIE, *Clerk.*

To the Honorable City Council of the City of Cambridge:—

We herewith submit our annual report for the year ending Dec. 31, 1882, including such recommendations and information as we think necessary for improving the sanitary condition of the city.

The following table shows the number and nature of nuisances abated: —

Privy vaults aud cesspools cleaned	116
Vaults repaired	4
Vaults made	3
Defective drainage	44
Defective water-closet	5
Filthy cellar	3
Filthy yards	11
Filthy privies	2
Water in cellars	5
Water in vacant lots	3
Cesspool removed	1
Manure in yards	4
Total	201

Four persons have been complained of and fined in the District Court, for violation of city ordinances in relation to health.

Nine tenements have been vacated by the order of the board, on account of their unhealthy condition. These orders were issued only after the owners or agents had been repeatedly notified of the unsanitary condition of their premises. Of these, six were put in proper condition by the owner, and the permission of the board was thereupon given for reoccupation. The other three are still vacant, and will probably be removed during the coming year, as they are very old and not worth repairing.

Early in the year the attention of this board was called to the sanitary condition of Coggswell Avenue and vicinity, and this locality was visited and thoroughly inspected by us. In Coggswell Avenue there is a small sewer originally built by private parties, into which are drained most of the houses on this avenue, and also the catch-basins built by the city. There is also a small sewer in Mead Street, into which are drained most of the houses on this street, as well as a number on Walden Street and Coggswell Court. These sewers, after passing through pri-

vate lands, have a common outlet into a narrow ditch, or what was originally a small water-course, north of Coggswell Avenue and near the coal and wood sheds of Mr. B. F. Rogers. From the point of entrance this sewage finds its way by means of this open ditch or water-course, which follows a crooked and zig-zag track, for the most part open and exposed, into the Dublin Street sewer.

There are also draining into this open ditch all the houses and other buildings having drainage on or near Crescent Avenue, the sewage from these sources entering the ditch near the point where it passes the rear of Hews' Pottery. This primitive system of drainage answered passably well as long as there were only a few houses discharging nothing but sink-water into this ditch, there being a sufficient flow of water to keep it fairly clean; but there are now more than seventy houses that have only this outlet for their drains, and many of them have water-closets. At the time of our inspection, this ditch was very offensive and in many places clogged with filth. A communication was sent to the Board of Aldermen in relation to this matter soon after the upper and most offensive part of this ditch was drained. Early in the fall a complaint was made to this board, signed by nearly all the residents in the vicinity of Hews' Pottery, in regard to the nuisance caused by this open sewer. The place was again inspected by the board, and the ditch was found clogged with sewage in many places, and a large amount of filth had accumulated along its sides, giving off a disgusting odor that annoyed the whole neighborhood. A second communication was sent to the Board of Aldermen, asking that the nuisance be abated at once. As a measure of temporary relief, the ditch was cleaned through its entire length, under the supervision of the City Engineer. This work revealed the fact that much more filth had accumulated on the bottom and sides of the ditch than was supposed. It also showed that the ground in many places was thoroughly saturated with sewage for several feet from its banks. Notwithstanding the fact that this ditch has been so recently cleaned, we believe that this condition of things is a constant danger to the health of people living in this vicinity, and that no temporary expedient can relieve them of this danger. We would therefore earnestly

recommend to the Board of Aldermen the building of a sewer to connect with the Dublin Street sewer, for the relief of this district. We are aware of the fact that such a sewer must go through private lands for most of the way, that the distance is nearly half a mile, and that the cost to the city will be large; yet the nuisance is of such a serious character that the work should be commenced at once in order that it may be abated before the approach of summer.

We would call the attention of your honorable body to the necessity of a more suitable, commodious, and attractive building or hospital for the treatment of patients suffering from contagious diseases. As most of you must be aware, the building now used for this purpose is an old one-story house, situated in the field at the rear of the almshouse. This house contains four rooms, each about twelve feet square, and adjoining each other in a row. The two end rooms have windows on two sides, while the middle rooms have windows on only one side, and there is no door or other means of communication between the second and third rooms. All these rooms are poorly finished, with loose doors and windows, doors opening directly outside, no proper drainage, no water except such as is brought in pails, no means of cooking, no cellar, no bath-room, and no conveniences in the way of water-closet, or even of a privy, except a leaky and very uncomfortable house used for this purpose, situated at some distance from the hospital building. This place has been occupied four times during the last two years, by patients suffering from contagious diseases. Fortunately, these cases have occurred in the warmer months of the year, and we have been able to keep the patients fairly comfortable. Without doubt we shall require a building for the treatment of such diseases, more or less, every year. We would invite your early attention to this matter, and most earnestly recommend that a suitable building, with proper conveniences as to water-closets, bath-rooms, washing, etc., be constructed at once. Patients treated in such a hospital rarely go at their own desire, but are sent there by the authorities, for the protection of the community, and they certainly have a right to expect the ordinary conveniences of all modern-built dwelling-houses. We believe that our city should not only

have a building with all these appliances for comfort, and the proper management of cases of contagious diseases, but that it should be pleasantly situated and attractive in appearance and surroundings. As long since as the year 1872, a strong protest was made by many of our most prominent citizens against the use of the present hospital building for such purposes.

The muck heaps near Niles Brothers' slaughtering establishment have been under observation during the year. Some portions of them have been removed, and what remains is well grassed over, so that no contamination of our water supply is to be feared from this source.

The condition of Alewife Brook during this year has been much the same as in the year previous, — very filthy. As there was no considerable period of dry weather, water enough has remained in the brook to carry off most of the sewage and filth entering it from our sewers and the slaughter-house. This nuisance is, however, growing more formidable every year, and we would again call your attention to the necessity of some immediate action that will cause its abatement.

The filthy condition of that part of Charles River basin within our city limits is increasing from year to year. We know of no other plan for obtaining relief from this nuisance than that recommended by the commission authorized, under the resolve of the Legislature of 1881, to investigate the subject of drainage in Boston and vicinity. This will, of course, require a concert of action of all the cities and towns draining into this basin. We recommend the consideration of this matter.

The number of nuisances caused by the keeping of cows in stables and barns unfit for such a purpose has been quite large during the past year, and the evil is a growing one. No such regulation as was contemplated in our report of last year has been made by this board, for the reason that no power has been given by statute to boards of health or municipal authorities that will allow them to make such regulations as would control the matter. We think this subject of sufficient importance for the City Council to ask for legislation thereon, and we respectfully solicit the assistance of your honorable body in obtaining such an act as will enable boards of health or municipal authorities effectually to control the same.

Late in September, Mrs. Clifford, an Irish emigrant, came by one of the Cunard line of steamships to this country, with three small children, to meet her husband, who had arrived here in the month of May last. Mrs. Clifford and one of the children were sick when they reached Cambridge. The family at once moved into house No. 29 Winthrop Street. In a few days another child was taken sick, next the husband, and also a young woman who had been called in to attend Mrs. Clifford and the child; and within a day or two of this time, Dr. O. C. Turner, the Assistant City Physician, who had been called in to attend them. The cases were determined to be typhus fever, and the sick family, as well as the girl who had been attending them, were removed to the building hereinbefore described, used as a hospital for contagious diseases, near the almshouse. Here, in a few days after, the remaining child was taken with the disease. The house from which this family was removed was taken in charge by this board and thoroughly disinfected. In all these cases at the almshouse the patients recovered. The hospital building was also disinfected, and the bedding, and most of the clothing worn by the patients during the sickness, were destroyed. No other cases of this disease occurred, and none are to be feared coming from this source. Dr. Turner, as is well known, lost his life from this disease. He contracted his sickness in the line of his duty as Assistant City Physician, the case terminating fatally in about twelve days. Like a good soldier he fell with his face to the enemy, in the front rank of the battle against disease and human suffering. The city of Cambridge should ever honor his memory as one who gave his life in her service.

As usual, we present with this report a tabulated monthly statement of the number of cases of scarlet fever, diphtheria, typhoid and typhus fever, reported to this board during the year. It will be seen by this statement that the number of cases of typhoid fever is about the same as last year, while a reference to the report of the number of deaths in 1882, also appended to this report, will show that the mortality was considerably less than in the previous year.

The cases of scarlet fever number little more than half of the figures of the year 1881.

The number of cases of diphtheria is about the same as in 1881, but we are glad to be able to state that the deaths from this cause have somewhat decreased in number. Of all the filth diseases, this has proved to be by far the most difficult to control. If it is ever to be controlled by sanitary measures, the work will be done only through the most hearty co-operation of all our house owners and citizens. We would earnestly recommend to all families, in which a case of this kind occurs, that the patient be at once isolated from everybody, except those necessary for proper care; that all unnecessary articles of furniture, and particularly of clothing, be removed from the sick-room; and that, as the great force of the contagion of this disease lies in the secretions of the mouth and throat, all cloths, towels, etc., used for receiving such secretions be burned as soon as soiled; that spit-cups or other vessels used by the patient contain a strong solution of chloride of lime, and when these are cleaned, more of the same solution be added before emptying, — the contents of such cups never to be thrown into a water-closet or privy vault or into a sink until first thoroughly disinfected. It is better that such contents be burned. After a death or recovery from diphtheria, the room occupied by the patient should be thoroughly disinfected. The simplest and best way of doing this is to use at least two pounds of sulphur to a room. This can be put in an iron kettle, old pan with ashes in the bottom, or any safe and convenient vessel, and set on fire, with the room closed for at least ten or twelve hours. All old clothing, mattresses, etc., should be hung upon chairs or the bedstead in such a way that the fumes of the sulphur can have free access to all parts of them. All clothing that is to be washed should be thoroughly boiled.

We append the usual tabulated monthly statement of the number of deaths during the year, and their causes. The total number is a few less than that of the previous year, notwithstanding the fact that there has been a large increase in our population.

Respectfully submitted,

D. H. THURSTON,
H. P. WALCOTT,
GEORGE F. PIPER,
Board of Health.

APPENDIX.

Causes of Death in 1882.

CLASSIFIED ACCORDING TO THE NOSOLOGY ADOPTED IN THE REGISTRATION REPORTS OF MASSACHUSETTS.

DISEASES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Scarlet Fever	....	1	....	1	3	1	1	....	1	....	....	....	8
Diphtheria	8	2	4	2	3	4	....	1	2	7	8	8	49
Measles	1	....	....	....	....	....	....	....	....	....	....	....	1
Croup	....	....	....	4	3	....	3	....	1	1	5	3	20
Whooping Cough	3	1	1	2	....	1	1	....	....	3	....	....	12
Typhoid Fever	4	....	1	1	2	....	1	....	1	3	3	1	17
Typhus Fever	....	....	....	....	....	....	....	....	....	1	....	....	1
Septicæmia	....	....	....	....	....	....	1	....	....	....	....	....	1
Erysipelas	....	....	1	3	1	1	....	....	1	1	....	....	8
Metria	....	....	1	....	1	....	....	1	2	2	1	2	10
Dysentery	....	....	....	....	....	....	....	1	....	....	....	....	1
Diarrhœa	....	....	....	1	1	....	....	5	4	....	....	....	11
Cholera Infantum	....	....	....	....	....	....	13	34	12	6	3	1	69
Cholera Morbus	....	....	....	....	....	....	1	....	....	....	....	....	1
Rheumatism	2	...	1	1	....	1	....	1	....	....	....	....	6
Cerebro-Spinal Meningitis.	....	....	1	1	....	....	....	....	1	....	....	....	3
Syphilis	....	1	....	....	....	....	....	1	....	1	....	2	5
Privation	....	1	....	....	....	....	....	....	....	....	....	....	1
Alcoholism	....	....	....	1	1	1	....	....	....	....	....	....	3
Dropsy and Anæmia	....	....	2	....	....	....	....	1	1	....	2	1	7
Caneer	1	2	2	3	9	....	....	5	....	....	2	3	27
Mortification	....	....	....	....	....	1	....	....	....	....	....	....	1
Scrofula													
Tabes Mesenteriea													
Phthisis	20	23	15	18	14	15	20	14	16	18	11	25	209
Hydrocephalus	2	....	1	3	1	1	1	2	3	1	....	1	16
Meningitis	4	2	3	3	4	4	1	1	3	7	3	1	36
Apoplexy	4	6	2	5	3	....	2	1	1	2	1	2	29
Paralysis	....	2	2	....	1	1	2	3	....	3	3	3	20
Insanity													
Epilepsy													
Tetanus	....	....	....	....	....	....	1	....	1	....	....	....	2
Convulsions	3	3	4	1	4	3	1	2	4	....	1	....	26
Brain Diseases	3	2	1	2	2	2	....	8	1	....	2	1	24
Pericarditis													
Aneurism	....	....	....	....	1	....	....	....	....	2	1	....	4
Heart Diseases	1	3	5	7	6	6	2	3	8	8	6	5	60
Ruptured Varieose Vein													
Laryngitis	....	....	....	....	....	....	....	....	1	....	....	1	2
Bronchitis	2	4	3	....	....	3	1	1	....	2	1	3	20
Pleurisy	....	....	....	....	....	1	....	....	....	....	....	....	1
Pneumonia	17	11	7	22	11	5	5	3	2	8	8	5	104
Asthma	....	..	1	....	....	....	....	....	1	1	....	....	3
Lung Diseases	3	1	1	2	....	1	1	2	....	1	1	....	13
Gastritis	....	....	....	....	1	....	....	....	....	....	....	....	1
Enteritis	....	1	....	....	1	2	....	....	....	....	....	....	4
Peritonitis	1	2	2	1	1	....	....	2	2	3	....	1	15
Ulceration of Intestines	....	....	....	....	....	....	....	....	2	....	....	....	2
Occlusion of Intestines	1	1	....	1	1	1	....	....	....	....	....	....	5

Causes of Death in 1882. — Continued.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Hernia	....	1	....	....	1	1	....	....	....	....	...	....	3
Ileus													
Fistula													
Stomach Disease													
Jaundice	....	....	....	....	....	....	....	....	1	....	....	....	1
Liver Disease	1	....	....	....	....	2	....	2	2	2	1	....	10
Spleen Disease													
Nephritis	1	....	....	....	....	....	....	....	....	....	....	1	2
Bright's Disease	2	2	....	3	4	3	3	2	2	2	2		25
Diabetes	1	1	....	....	....	....	1	....	....	....	....	1	4
Cystitis	....	1	....	....	....	1	....	....	1	....	....	....	3
Pott's Disease	....	....	....	....	1	....	....	....	....	....	....	....	1
Kidney Diseases													
Diseases of Uterus													
Phlegmon													
Eczema													
Tumor	....	....	1	2	....	....	1	....	....	....	....	....	4
Still-born	3	3	3	6	5	5	3	9	6	5	3	2	53
Premature Birth and Infantile Debility	5	7	3	4	5	2	6	10	3	6	5	6	62
Cyanosis	....	....	....	2	....	....	....	....	....	....	....	....	2
Spina Bifida	....	....	....	....	....	....	....	....	....	....	....	1	1
Other Malformations													
Teething													
Umbilical Hemorrhage													
Hemorrhage	....	....	....	....	....	1	....	....	....	....	....	1	2
Necrosis	....	....	1	....	....	....	....	....	....	....	....	....	1
Childbirth	2	....	....	....	....	....	....	....	....	1	....	1	4
Puerperal Convulsions	....												
Old Age	2	4	1	3	3	4	1	4	....	3	4	1	30
Atrophy and Debility	....	....	1	....	....	1	1	1	....	2	3	2	11
Fractures and Contusions	....	....	1	....	....	1	....	....	....	....	....	3	5
Burns and Scalds	....	....	....	....	....	2	....	....	....	....	1	....	3
Drowning	....	1	....	....	....	....	1	....	1	1	....	....	4
Suffocation	....	....	....	....	....	....	....	....	....	1	....	....	1
Other Violence	....	1	....	2	....	....	2	1	1	....	....	....	7
Suicide	....	....	....	....	....	1	....	....	....	....	....	....	1
Unknown	1	2	....	3	1	1	....	2	....	1	1	....	12
Total	98	92	72	110	95	80	77	123	88	105	82	89	1,111

Cases of Scarlet Fever, Diphtheria, Typhoid Fever, and Typhus Fever, reported to the Board of Health for the Year 1882.

Name of Disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Scarlet Fever	8	5	1	8	8	8	7	3	2	7	6	8	71
Diphtheria	35	7	12	12	9	4	8	7	18	20	28	48	208
Typhoid Fever	12	1	2	2	1	....	5	12	28	27	9	1	100
Typhus Fever	....	....	....	....	....	....	....	....	2	5	...	....	7

ANNUAL REPORT

OF THE

CHIEF ENGINEER OF THE CAMBRIDGE FIRE DEPARTMENT.

Chief Engineer's Office, City Hall,
Cambridge, Dec. 19, 1882.

To the Honorable City Council of the City of Cambridge: —

Gentlemen, — In conformity with the provisions of the ordinance in relation to the Fire Department, I herewith respectfully present my annual report for the year beginning Dec. 1, 1881, and ending Nov. 30, 1882.

Manual Force.

The present manual force of the department numbers ninety-seven officers and men. The permanent force consists of one chief engineer, five engineers of steamers, one relief engineer, one chemical engineman, five steamer drivers, one chemical-engine driver, five hose drivers, two hook and ladder drivers, and three fire-alarm telegraph men. Total, twenty-four. The call force consists of three assistant engineers, seven foremen, seven assistant foremen, five firemen of engines, twenty-nine hosemen, and twenty-two hook and ladder men. Total, seventy-three.

Appropriations, Receipts, and Expenditures.

The appropriation for the Fire Department, for thirteen months, beginning Nov. 1, 1881, and ending Nov. 30, 1882, was $58,332.02. The receipts of the department were $360.90. The expenditures of the department have amounted to $58,332.02, as the following statement will show: —

Alarms for fires	$92 00
Apparatus and repairs	897 94
Enginemen's services, including engineers	34,350 43
Fuel for houses and engines	1,465 99
Gas	936 12
Hardware and tools	187 83
Harnesses and repairs	172 70
Hay, grain, and straw	3,419 70
Horse	325 00
Horse-hire and men	981 75
Horse-shoeing	496 05
Houses, repairs of	975 99
Hydrants, care of	210 25
Hose and repairs	1,412 06
Rent of shed	90 00
Supplies	435 34
Telegraph supplies and repairs	1,639 80
Veterinary services and medicine	150 98
Washing	330 46
Water for hydrants, reservoirs, and houses	9,105 00
Water for hydrants, balance due for 1880 and 1881	270 00
Miscellaneous	386 63
Total	$58,332 02
Appropriation	58,332 02

Apparatus.

The apparatus of the department consists of five steam fire engines, one chemical engine, five hose carriages, two hook and ladder trucks, four fuel wagons, and one fire-alarm wagon, all of which are in serviceable condition. There are also two old engines, one of which is used as a relief engine, the other not being serviceable, and one two-wheeled hose carriage used for relief purposes. The matter of selling the two old engines and purchasing a new one is a question now before your Honorable Boards.

A Bangor extension ladder was purchased and added to the equipment of Hook and Ladder No. 2. This ladder can be extended to a height of sixty-five feet, and is more easily handled and better adapted to reach the upper stories of high buildings than the common splice ladder.

Hose.

The total amount of two and one half inch hose now in service in this department is 12,300 feet; of this amount 8,850

feet are cotton, and 3,450 feet are leather hose. During the year 1,200 feet of cotton hose were purchased, and 650 feet of cotton and 500 feet of leather hose were condemned. There are also in service on chemical engine, 300 feet of one and one half inch cotton, and 200 feet of three-fourths inch rubber hose. The leather hose is old and unreliable, and will not stand the strain that may be required of it at fires. I would therefore recommend the purchase of an additional quantity of cotton hose the coming year.

Horses.

The horses in use by this department number twenty-two, some of which have been in the service for a number of years, but are becoming too aged for the duties required of them, and it may be necessary to exchange them the coming year for younger horses. One has been procured by exchange and purchase during the year, to take the place of one disabled for fire service by lameness.

Fire-Alarm Telegraph.

But few changes have been made in this branch of the service during the year. Since my last report poles were set and the lines extended from Lake View Avenue, through Concord Avenue, to a point near Hittinger's ice-houses, and a signal box located, numbered 89. A box numbered 114 was purchased by Goepper Brothers, and by the permission of the Committee on Fire Department, it was connected with the fire-alarm wires, and is located at their barrel manufactory on Ninth Street, so that in case of fire at their factory, there would be no delay in giving the alarm. Two indicators were also purchased and connected with the fire-alarm wires which show the number of the box from which the alarm has been given, and are located at engine houses Nos. 1 and 3.

I would call the attention of your Honorable Boards to the importance of prompt and definite alarms in cases of fire; it is so great that the necessity of maintaining our present system of fire-alarm telegraph in a reliable and efficient condition will be generally conceded. To do this some important changes and improvements should be made as early as possible.

The fire-alarm telegraph was first put in operation in this

city Sept. 3, 1869. The apparatus was divided upon four separate lines or circuits, and connected with a four-circuit repeater at the central office, and consisted of 15 miles of wire, 30 signal boxes, 1 bell striker, 8 gongs, and 2 tappers. Since that time there have been added to the system, 71 miles of wire, 37 signal boxes, 4 bell strikers, 10 gongs, 22 tappers, and 2 indicators. The large amount of territory that each circuit now covers may at any time be left without the means of giving an alarm, by a single break in the line. Comparison of our fire-alarm system with that of other cities convinces me that we need a new automatic repeater of eight or ten circuits, and that our four overloaded lines should be increased to eight, with an equalized distribution of the apparatus.

During the years which have elapsed since the construction of our fire alarm, many valuable improvements have been made, some of which I believe it would be the part of economy and safety for the city to secure, with the new repeater and the additional lines.

Hydrants.

Eighteen hydrants of the post pattern have been located during the year in places where they were much needed, five of which were substituted for that number of flush hydrants removed, making the total number now in use for fire purposes five hundred and ninety.

Houses.

The several houses for the apparatus are generally in good condition, except that some of them show the need of being painted. A portion of the stable floor of Engine House No. 5 was renewed and iron bottoms were also placed in the stalls, which will be more durable than those of wood. In making repairs on the house of Hook and Ladder No. 2, it was necessary to remove a large portion of the sills, floor timbers, and flooring, as they were found to be in a rotten and unsafe condition, and to replace them with new lumber which was done at considerable expense.

The house is now in fair condition, but will soon have to be replaced by a more substantial building.

Appointments, Discharges, and Transfers.

Richard F. Tobin, first assistant engineer, was discharged at his own request April 12; Nathaniel W. Bunker was promoted to first assistant engineer, Charles W. Brackett to second assistant engineer, and William B. Cade was appointed third assistant engineer to fill the vacancy same date.

Engine Co. No. 1. Charles A. Powers was discharged July 1, and Edward B. O'Brien July 12, at their own request, and Robert L. Williams and James McLane were appointed to fill the vacancies July 19. Robert T. Hixon, driver of hose carriage, was discharged at his own request Oct. 11, and Charles R. Hooker was appointed to fill the vacancy, same date.

Engine Co. No. 2. Capt. William B. Cade was promoted to third assistant engineer April 12; Daniel McCarthy, assistant foreman, and Joseph Fellows hoseman, were discharged at their own request April 18; James Cunningham was appointed foreman, Arthur C. Day, assistant foreman, and Charles E. Snow and John G. Hicks, hosemen, April 26.

Engine Co. No. 4. George E. Muzzey was appointed driver of engine Jan. 11.

Hugh T. Barker was transferred to Engine Co. No. 5, Jan. 20, and Edward A. Hurd was appointed to fill the vacancy Feb. 1.

Engine Co. No. 5. James F. Glynn was discharged at his own request April 24, and William H. Crump was appointed to fill the vacancy May 3.

Hook and Ladder Co. No 1. John A. McDermott was appointed ladderman Jan. 11.

Hook and Ladder Co. No. 2. Charles E. McMeniman was appointed Dec. 7. Michael H. Shea was discharged at his own request March 1, and Albert Smith was appointed to fill the vacancy March 15. Charles H. Chapman was transferred to Engine Co. No. 2, April 26, and Charles E. White was appointed to fill the vacancy May 3.

Fires and Losses.

There have been 103 alarms during the year for all causes; of this number 5 were given for fires out of the city, 89

for fires in the city, and 9 were false alarms, of which 7 were maliciously given.

The amount of loss by fire, as near as could be ascertained, was $123,231, upon which there was an insnrance of $205,984. The amount of insurance paid was $92,235.42. Elsewhere will be found a statement to which you are referred for details of each fire.

Accidents.

John Haley, of Engine Co. No. 2, while responding to an alarm of fire on the evening of April 7, had his right wrist broken by running against another person who was passing in the opposite direction.

In proceeding to a fire on the evening of June 16, the Chemical Engine in turning out of the car track on Prospect Street, to pass a horse-car, slued against a tree which stands out partly beyond the line of the curbstone, the hind-wheel of the engine striking the tree with such force as to throw the driver, William H. Foss, and engineman, Lewis C. Clark, from the engine. The former received severe injury to his right ankle, and was otherwise bruised; the latter escaped injury. The engine was considerably damaged.

By the burning of Moses M. Sawin's stable on Appian Way, at five o'clock on the afternoon of June 17, 1882, Samuel Nixon and James Roach lost their lives, being burned to death. It was supposed that they were asleep in the hay-loft at the time, as they were seen in the stable but a short time before the fire was discovered. Mr. Sawin employed Nixon as hostler, and Roach as helper at times.

Charles H. Waite, of Hook and Ladder Co. No. 1, had his ankle sprained while getting upon the pan of Engine No. 2, on its way to a fire June 21.

Albert Smith, of Hook and Ladder Co. No. 2, had his ankle sprained while responding to an alarm of fire Oct. 26.

Capt. William F. Newman, of Engine Co. No. 3, received a severe sprain of his right ankle Oct. 25, while on duty at a fire.

At 1.15 o'clock on the morning of June 21, the family of William Hawkins, residing on Charles Street, were aroused from sleep by the effects of smoke in their rooms, and they

quickly discovered that the house was on fire, the cause being the explosion of a kerosene lamp left lighted for all night. In attempting to escape from the building they found their only means of exit were cut off by the flames, and Mrs. Henrietta Gibbs, the housekeeper, and Misses Lizzie, Cora, and Mary Hawkins were forced to jump from the second-story window to the ground, each being more or less injured about the limbs and body.

Acknowledgments.

In conclusion, I desire to tender my acknowledgments to his Honor the Mayor, the City Council, and the Joint Standing Committee on Fire Department, for the cordial support of such measures as have been recommended for the good of the department during the past year.

To the officers and members of the Fire Department I would also return thanks for the prompt and efficient manner in which they have performed their arduous and oftentimes dangerous duties.

Respectfully submitted,

THOS. J. CASEY, *Chief Engineer.*

FIRES AND ALARMS.

From Dec. 1, 1881, to Nov. 30, 1882.

DECEMBER.

Thursday, Dec. 1, 7.19 p. m. Box 46.

Green Street. Owned by E. H. Wakefield; occupied by J. F. Callahan, as dwelling. Cause, breaking of kerosene lamp. Alarm needless.

Friday, Dec. 2, 6.51 p. m. Box 53.

Mount Auburn Street. Owned and occupied by T. A. Phelan, as dwelling. Cause, explosion of kerosene lamp. Loss slight.

Friday, Dec. 2, 11.19 p. m. Box 59.

Harvard Street. Owned by J. M. Hilton. Loss, $87. Insurance, $3,000. Occupied by F. L. Payson, as dormitory. Loss, $100. No insurance. Cause, careless use of matches.

Saturday, Dec. 10, 2.46 p. m. Box 28.

Hampshire Street. Owned by O. S. Bullock; occupied by William Young, as smoke-house. Loss trifling. Cause, sparks from furnace. Alarm needless.

Sunday, Dec. 11, 8.11 a. m. Box 9.

First Street. Owned by N. D. Woodbury; occupied by W. H. Hazlett & Co., as dry-house. Loss, $530. Insurance, $2,000. Cause unknown.

Monday, Dec. 19, 8.12 p. m. Box 53.

Charles River Street. Owned by Michael O'Sullivan; occupied by J. J. Splaine, as grocery. Cause, upsetting of stove.

Wednesday, Dec. 21, 6.20 a. m. Box 9.

First Street. Owned by U. J. Dailey; occupied by Thomas McGue, as stable. No loss. Cause unknown.

Thursday, Dec. 22, 5.36 p. m. Box 16.

Broadway. Owned and occupied by Sylvester Tower, as piano-key manufactory. Loss slight. Cause, sparks from sand-papering wheel.

JANUARY.

Thursday, Jan. 12, 7.04 p. m. Box 14.

Thorndike Street. Cause, smoke mistaken for fire. Alarm needless.

MONDAY, Jan. 16, 2.48 P. M. Box 25.

Main Street. Owned by E. P. White; occupied by Barney King, as barber's shop. Loss slight. Cause unknown.

TUESDAY, Jan. 17, 2.17 P. M. Box 35.

Columbia Street. Owned and occupied by Eusebius Sawyer, as dwelling. Cause, boiling over of kettle of fat.

THURSDAY, Jan. 19, 6.35 P. M. Box 37.

River Street. Owned by Ellis heirs. Loss, $50. Insurance, $2,000. Occupied by R. M. Campbell, as dwelling. Loss, $30. No insurance. Cause, breaking of kerosene lamp.

MONDAY, Jan. 23, 9.04 A. M. Box 9.

Second Street. Owned by Mrs. W. H. Hubbard; occupied by several families, as dwelling. Cause, thawing water pipe.

FEBRUARY.

FRIDAY, Feb. 3, 10.10 P. M. Box 25.

Pacific Street. Owned by J. G. Russell. Loss, $6,000. Insurance, $6,000. Occupied by Jaynes & Co. as barrel manufactory. Loss, $60,000. Insurance, $40,000. Boston and Albany Railroad Company for cars. Loss, $884. Insurance, $884. Originated in dry-house. Cause unknown.

TUESDAY, Feb. 7, 4.26 A. M. Box 26.

Main Street. Owned by Mrs. J. P. Steenburg; occupied by M. A. McCarthy, as dwelling. Originated in closet. Cause, unknown.

FRIDAY, Feb. 10, 1.26 A. M. Box 12.

Bridge Street. Owned by John Carlin's heirs. Loss, $500. Insurance, $1,500. Occupied by several families, as dwellings. Cause, explosion of kerosene lamp.

SATURDAY, Feb. 18, 7.16 P. M. Box 46.

Main Street. False alarm given by some malicious person.

SUNDAY, Feb. 19, 11.58 P. M. Still.

State Street. Owned by Rhoades estate; occupied by Alfred Fitzpatrick, as planing mill. Originated in boiler-room. Cause, hot ashes.

SUNDAY, Feb. 26, 9.23 A. M. Box 32.

Cambridge Street. Owned by Oliver Hastings estate. Loss, $110. Insurance, $1,500. Occupied by several families, as dwellings. Cause, sparks from chimney setting fire to roof.

MARCH.

WEDNESDAY, March 1, 2.46 P. M. Box 15.

Fourth Street. Owned by Michael McGoune; occupied by Cornelius O'Neil, as dwelling. Cause, wood drying near stove taking fire.

THURSDAY, March 2, 3.05 A. M. Box 13.

Gore Street. Owned and occupied by P. P. Durnan, as stable. Loss, $20. Insurance, $300. Cause unknown.

THURSDAY, March 2, 3.51 P. M. Box 34.

Elm Street. Owned by Mrs. Ellen McCarthy; occupied by Mrs. Ann Williams, as dwelling. Cause, pan of fat taking fire.

THURSDAY, March 2, 9.29 P. M. Box 12.

Short Street. Owned by E. W. Bettinson; occupied by Daniel Donovan, as dwelling. Loss trifling. Originated in clothes-closet. Cause unknown.

MONDAY, March 13, 10.46 A. M. Box 4.

Fire in Somerville.

TUESDAY, March 14, 4.30 A. M.

Fire in Somerville. Assistance called for.

WEDNESDAY, March 15, 7.48 P. M. Box 78.

Concord Avenue. False alarm given by some malicious person.

THURSDAY, March 16, 11.08 A. M. Box 35.

Elm Street. Boiling over of kettle of tar in street. Alarm needless.

FRIDAY, March 17, 10.05 A. M. Box 25.

Blanche Street. Owned and occupied by Brown, Murphy & Thorndike, as window-shade manufactory. Loss, $100. No insurance. Cause, boiling over of kettle of varnish.

SATURDAY, March 18, 8.32 A. M. Box. 36.

Main Street. Owned by Robert Douglass; occupied by several parties for business purposes. Loss trifling. Cause, sparks from chimney setting fire to roof.

SUNDAY, March 26, 4.58 P. M. Box 8.

Spring Street. Owned by C. W. Munroe. Loss, $266. Insurance, $7,600. Occupied by several families, as dwellings. Cause, defective chimney.

MONDAY, March 27, 7.47 P. M. Box 47.

Broadway. False alarm given by some malicious person.

APRIL.

SATURDAY April 1, 11.02–11.05 A. M. Box 9.

First Street. Owned by N. D. Woodbury; occupied by W. H. Hazlett & Co., as dry-house. Loss trifling. Cause, careless use of lamp, setting fire to lumber.

SUNDAY, April 2, 7.38 P. M. Box 71.

North Avenue. Owned and occupied by Mrs. Mary O'Connor, as stable. Cause, pipe smoking. Alarm needless.

WEDNESDAY, April 5, 11.49 A. M. Box 83.

Holworthy Place. Owned by J. G. & N. G. Gooch. Loss, $300. Insurance, $300. Occupied by James Mealy, as stable. Owned by J. G. & N. G. Gooch. Loss, $65. Insurance, $2,000. Occupied by James Mealy, as dwelling. Owned by Patrick Mitchell. Loss, $128. Insurance, $1,200. Occupied by I. N. Higgins, as dwelling. Originated in stable. Cause unknown.

THURSDAY, April 6, 9.36 A. M. Box 16.

Pelham Street. Owned by Mrs. Margaret Tobin. Occupied by Mrs. Ellen Morse, as dwelling. Cause, pot of meat on stove taking fire.

FRIDAY, April 7, 8.24 P. M. Box 14.

Sixth Street. Owned and occupied by Daniel Randall, as dwelling. Slight loss. Cause, upsetting of kerosene lamp. Alarm needless.

SATURDAY, April 8, 7.55 P. M. Box 15.

Fifth Street. Owned by A. F. Gurney; occupied by Ole Johnson, as dwelling. Loss trifling. Cause, explosion of kerosene lamp.

THURSDAY, April 13, 7.59 P. M. Box 2.

Prison Point Street. False alarm given by some malicious person.

SATURDAY, April 15, 9.06 A. M. Box 52.

Harvard Street. Owned and occupied by Old Cambridge Baptist Society, as church. Cause, smoke mistaken for fire. Alarm needless.

THURSDAY, April 27, 4 A. M. Box 28.

Hampshire Street. Owned by F. H. Peabody; occupied by Boston Standard Wheel Company, as foundry. Loss trifling. Cause unknown.

FRIDAY, April 28, 8.27 P. M. Box 56.

Kirkland Street. False alarm given by some malicious person.

MAY.

MONDAY, May 15, 5.16 P. M. Box 15.

Fifth Street. Owned by Bartley heirs; occupied by Catherine Sullivan, as dwelling. Cause, pot of meat on stove taking fire.

TUESDAY, May 16, 9.52 A. M. Box 13.

Cambridge Street. Owned by Enos Reed heirs. Loss, $48. Insurance, $1,000. Occupied by G. P. Simmons, as dwelling. Loss, $75. No insurance. Originated in clothes closet. Cause unknown.

WEDNESDAY, May 31, 5.50 A. M. Box 15.

Fourth Street. Owned and occupied by Mrs. C. E. Quinn, as stable. Loss, $180. Insurance, $200. Owned and occnpied by Mrs. C. E. Quinn, as dwelling. Loss, $120. Insurance, $1,600. Owned by Richard Beamish. Loss, $30. Insurance, $1,400. Occupied by Mrs. Margaret Beamish, as dwelling.

Vine Street. Owned by Thomas Taff's heirs. Loss, $275. Insurance, $6,000. Occupied by several families, as dwellings. Owned by Union Institution for savings. Loss, $278. Insurance, $2,000. Occupied by several families, as dwellings. Originated in stable. Cause unknown.

WEDNESDAY, May 31, 5 P. M. Still.

Brighton Street. Untenantable dwelling owned by G. M. Rogers. Loss trifling. Cause, set on fire by boys.

JUNE.

THURSDAY, June 1, 12.38 A. M. Box 74.

Dublin Street. Unoccupied dwelling owned by C. E. Tibbetts. Loss, $1,667. Insurance, $1,500. Cause, incendiary.

SATURDAY, June 3, 12.59 A. M. Box 59.

Rear Harvard Square. Owned and occupied by Owen Martin, as shoemaker. Loss, trifling. Cause unknown.

FRIDAY, June 9, 7.22 P. M. Box 9.

First Street. Owned by N. D. Woodbury. Occupied by W. H. Hazlett & Co., as boiler-room. No loss. Cause, sparks from furnace setting fire to shavings.

FRIDAY, June 9, 10.25 P. M. Box 27.

Dickinson Street. Out-building owned and occupied by James Luke, as storeroom. Loss, $25. No insurance. Cause, incendiary.

MONDAY, June 12, 12.50 P. M. Still.

Prospect Street. Owned and occupied by Cornelius Higgins, as dwelling. Loss, $82. Insurance, $1,200. Originated in closet. Cause unknown.

WEDNESDAY, June 14, 5.33 A. M. Box 21.

Allston Street. Owned and occupied by Catherine Fineran, as dwelling. Loss, $40. Insurance, $700. Originated in clothing. Cause unknown.

FRIDAY, June 16, 6.56 P. M. Box 13.

Gore Street. Owned by John Green. Loss, $8.00. Insurance, $3,000. Occupied by several families, as dwelling. Cause, soot in chimney taking fire.

SATURDAY, June 17, 5–5.10 P. M. Box 61.

Appian Way. Owned and occupied by M. M. Sawin, as stable. Loss, $10,000. Insurance, $2,000. Owned by M. M. Sawin. Loss, $87. Insurance, $2,000. Occupied by S. O. Sawin, as dwelling. Owned by Mrs. A. M. B. Stephens. Loss, $275. Insurance, $1,200. Occupied by J. A. Lovett, as dwelling. Loss, $25. No insurance. Owned by Mrs. M. C. Tolman. Loss, $20. Insurance, $2,000. Occupied by several families, as dwellings. Owned and occupied by Mrs. M. C. Tolman, as dwelling. Loss, $15. Insurance, $3,000. Originated in stable. Cause, supposed by pipe smoking.

TUESDAY, June 20, 1.03 A. M. Box 6.

Third Street. Owned by Cambridge Gas Light Co. Loss, $1,000. Insurance, $1,400. Occupied by McMurray & Chisholm, as blacksmith and wheelwright shop. Loss, $800. Insurance, $1,000. Cause unknown.

WEDNESDAY, June 21, 1.22 A. M. Box 7.

Charles Street. Owned by William Hawkins. Loss, $1,187. Insurance, $2,000. Occupied by William Hawkins and others, as dwellings. Loss, $600. Insurance, $500. Cause, explosion of kerosene lamp.

WEDNESDAY, June 21, 1.12 P. M. Box 46.

Franklin Street. Bonfire in vacant lot set by boys. Alarm needless.

FRIDAY, June 23, 9.15 P. M. Box 7.

Munroe Street. Burning grass in vacant lot. Alarm needless.

JULY.

MONDAY, July 3, 9.38 P. M. Box 91.

North Avenue. Owned and occupied by W. A. Bock, as green-house. Loss, $50. No insurance. Cause, fire crackers.

TUESDAY, July 4, 12.24 P. M. Box 34.

Hampshire Street. Unoccupied dwelling owned by Mrs. Jane Moore. Loss trifling. Originated on the roof. Cause, fire-crackers.

TUESDAY, July 4, 1.17 P. M. Box 43.

Grant Street. Owned by Edward Stokes. Loss, $3. Insurance, $1,500. Occupied by several families, as dwellings. Originated on the roof. Cause, fire-crackers.

WEDNESDAY, July 12, 4.57 P. M. Box 9.

Cambridge Street. Owned and occupied by F. M. Holmes Furniture Company, as storehouse for oils. No damage. Cause, sparks from boiler-room.

FRIDAY, July 14, 9.08 P. M. Box 16.

Rear Broadway. Owned by W. W. Forbes. Occupied by J. J. Lally, as dwelling. Cause, breaking of kerosene lamp. Alarm needless.

SUNDAY, July 16, 11.44 A. M. Box 32.

Norfolk Street. Owned by Philip Malone. Occupied by Dennis Kelleher, as dwelling. Loss trifling. Originated in clothes closet. Cause unknown.

MONDAY, July 24, 1.24 P. M. Box 2.

Bridge Street. Owned and occupied by Horatio Wellington & Co., as coal shed. No loss. Cause, sparks from hoisting engine.

SATURDAY, July 29, 2.15 P. M. Box 74.

Bolton Street. Owned by William Phelan. Loss, $475. Insurance, $500. Occupied by Thomas Cummings, as dwelling. Loss, $200. No insurance. Originated in cellar. Cause unknown.

AUGUST.

SUNDAY, Aug. 6, 11.56–12 M. Box 75.

Raymond Street. Owned by G. A. Patrick. Loss, $775. Insurance, $1,500. Occupied by George Iles, as dwelling. Loss, $550. Insurance, $800. Cause unknown.

TUESDAY, Aug. 8, 6.56 P. M, Box 9.

Thorndike Street. Owned and occupied by F. Geldowsky Furniture Company, as lumber shed. Loss, $1,328. Insurance, $11,200. Cause unknown.

TUESDAY, Aug. 15, 8.34 P. M. Box 31.

Harding Street. Owned by Catherine Gourtland. Loss, $5. No insurance. Occupied by W. H. Rollins, as carpenter shop. Cause, incendiary.

SATURDAY, Aug. 19, 12.12 A. M. Box 14.

Cambridge Street. Owned by T. F. Quinn. Loss, $90. Insurance, $150. Occupied by E. J. Johnson, as grocery. Loss, $112. Insurance, $350. Cause, explosion of kerosene lamp.

WEDNESDAY, Aug. 23, 4.14 P. M. Box 9.

Cambridge Street. Owned and occupied by G. W. Felt, as blacksmith. Loss $10. Insurance, $2,200. Cause, sparks from chimney setting fire to roof.

THURSDAY, Aug. 24, 2.07 P. M. Box 35.

Norfolk Street. Owned and occupied by L. P. C. McKusick, as dwelling. No loss. Cause, ignition of oiled rags.

FRIDAY, Aug. 25, 8.25 P. M. Box 21.

Waverly Street. Owned by Edmund Reardon. Loss, $32. Insurance, $3,000. Occupied by Michael Nealand, as dwelling. Loss, $90. No insurance. Cause, child playing with matches.

WEDNESDAY, Aug 30, 1.14 A. M. Box 32.

Fire in Somerville. Assistance called for.

WEDNESDAY, Aug. 30, 8.15 P. M. Still.

State Street. Owned by Rhodes estate. Occupied by Alfred Fitzpatrick, as boiler-room. Loss, trifling. Cause, sparks from furnace.

SEPTEMBER.

SATURDAY, Sept. 2, 11.47 A. M. Box 14.

Gore Place. Owned by J. D. Lane. Occupied by S. E. Stiles, as dwelling. No loss. Cause, child playing with matches.

SATURDAY, Sept. 9, 7.22 P. M. Box 4.

Gore Street. Owned and occupied by C. W. H. Moulton, as ladder manufactory. Loss, $90. Insurance, $2,000. Originated in office. Cause, careless use of lamp.

SUNDAY, Sept. 10, 7.35 P. M. Still.

Cambridge Street. Owned by Mary A. McCarthy. Occupied by Nicholas Mullin, as dwelling. Loss, $25. Cause, explosion of kerosene lamp.

MONDAY, Sept. 11, 7.45 P. M. Box 9.

First Street. Owned by U. J. Dailey. Loss, $25. No insurance. Occupied by M. J. Hirl, as brush manufactory. Loss, $430. Insurance, $1,000. Cause unknown.

TUESDAY, Sept. 26, 9.35 P. M. Box 26.

Main Street. Owned by Allen & Endicott. Occupied by W. O. Barbour & Co., as iron foundry. Loss trifling. Cause, sparks from chimney setting fire to the roof.

SATURDAY, Sept. 30, 3 22 P. M. Box 73.

Clifton Street. Owned by Bridget Fitzgerald. Occupied by John O'Connor, as dwelling. Loss trifling. Cause, hot flatiron setting fire to clothes. Alarm needless.

OCTOBER.

TUESDAY, Oct. 3, 3.54 P. M. Box 71.

Fire in Arlington, near Cambridge line.

FRIDAY, Oct. 6, 4.34 A. M. Box 59.

Dunster Street. Owned and occupied by Union Railway Company, as repair shop. Loss, $6,599. Insurance, $14,000. Cause, sparks from boiler furnace.

TUESDAY, Oct. 10, 6.29 P. M. Box 24.

Brookline Street. Owned by John Lennon. Loss, $16. Insurance, $2,000. Occupied by John McGilvray, as dwelling. Loss, $20. No insurance. Cause, breaking of kerosene lamp.

WEDNESDAY, Oct. 11, 7.36 P. M. Box 43.

Putnam Avenue. Owned by Mrs. T. H. Seavey. Occupied by G. O. Rollins, as dwelling. Loss, trifling. Cause, breaking of kerosene lamp. Alarm needless.

TUESDAY, Oct. 17, 12.23 A. M. Box 24.

Decatur Street. Privy, owned by P. C. Rogers. Loss, $20. No insurance. Cause, incendiary.

WEDNESDAY, Oct. 18, 4.15 P. M. Box 47.

Broadway. Owned by J. A. Brown. Loss, $280. Insurance, $4,500. Occupied by O. H. Durrell, as dwelling. Loss, $249. Insurance, $1,000. Cause, child playing with matches.

WEDNESDAY, Oct. 25, 8.29 A. M. Box 2.

Prison Point Street. Owned and occupied by Eastern Railroad Corporation, as coal shed. Loss, $1,595. Insurance, $11,000. Originated in coal. Cause, spontaneous combustion.

FRIDAY, Oct. 27, 8.09 P. M. Box 27.

Broadway. Owned and occupied by George Close, as confectionery. Loss, $25. No insurance claimed. Cause, a barrel placed on hot stove to dry taking fire.

TUESDAY, Oct. 31, 9.05 P. M. Box 21.

Putnam Avenue. Owned and occupied by Peter Mullin, as dwelling. Loss, $799. Insurance, $5,000. Cause unknown.

NOVEMBER.

WEDNESDAY, Nov. 1, 7.02 P. M. Box 26.

Main Street. Owned by Howe heirs. Occupied by L. P. Wilson, as carpenter shop. Cause, breaking of kerosene lamp. Alarm needless.

THURSDAY, Nov. 2, 9.10 A. M. Still.

Ericsson Place. Owned by G. H. Thwing. Occupied by F. R. Chessman, as dwelling. Loss, $20. No insurance. Cause unknown.

MONDAY, Nov. 6, 11.38 A. M. Box 47.

Maple Avenue. Owned and occupied by F. E. Gregory, as dwelling. Loss trifling. Cause, soot in chimney taking fire.

SUNDAY, Nov. 12, 7.37 A. M. Box 2.

Prison Point Street. Owned and occupied by Boston, Lowell and Concord Railroad Company, as coal shed. Loss, $400. No insurance. Originated in coal. Cause, spontaneous combustion.

TUESDAY, Nov. 14, 12.10 P. M. Still.

Blackstone Street. Owned and occupied by H. O. Houghton & Co., as coal shed. Loss $261. Insurance, $2,000. Originated in coal. Cause, spontaneous combustion.

SATURDAY, Nov. 18, 7.11 P. M. Box 46.

Main Street. False alarm given by some malicious person.

SUNDAY, Nov. 19, 3.14 A. M. Box 73.

Spruce Street. Fire in Belmont. Alarm given through a mistake.

MONDAY, Nov. 27, 6–6.10 P. M. Box 6.

Main Street. Owned and occupied by Kendall & Roberts, as machine shop. Loss, $22,650. Insurance, $40,300. Originated on second floor. Cause unknown.

MONDAY, Nov. 27, 7.18 P. M. Box 46.

Main Street. False alarm given by some malicious person.

APPENDIX.

Joint Standing Committee on Fire Department.

ALDERMEN..... Doyle and Davis.
COUNCILMEN..... Henderson, Bent, and Neligan.

Board of Engineers.

Name.	Residence.	Rank.	Age.
Thomas J. Casey.....	173 Cambridge St.	Chief	49
Nathaniel W. Bunker....	6 Beech St	1st Assistant ..	39
Charles W. Brackett	133 Mt. Auburn St.	2d " ..	46
William B. Cade	27 Park St.....	3d " ..	48
Nathaniel W. Bunker....	.....	Secretary	

Engine Company No. 1.

House, Brattle Square.

Name.	Rank.	Age.	No. of Badge.
William H. Emery	Foreman.....	49	1
John H. Brown	Asst. Foreman	31	11
Edward E. Priest.....	Engineer	45	3
James Jefferson.....	Fireman	29	2
Hiram W. Hooker	Driver of engine	44	5
Charles R. Hooker	Driver of hose carriage.	38	10
John L. Jones, Jr.....	Hoseman	31	4
John K. Perkins.....	"	32	12
Daniel E. Shea	"	26	7
William A. Carlin.....	"	31	8
James McLane.....	"	22	9
Robert L. Williams.....	"	33	6

Engine Company No. 2.

House, Main Street, near Winsor.

Name.	Rank.	Age.	No. of Badge.
James Cunningham	Foreman	40	28
Arthur C. Day	Asst. Foreman	45	25
Thomas Wiseman	Engineer	38	17
William E. Cade	Fireman	23	23
John H. Walker	Driver of engine	53	19
Albert F. Sawyer	" hose carriage.	39	20
Benjamin D. Foss	Hoseman	46	18
John McCarthy	"	32	24
John Healy	"	28	27
Charles H. Chapman	"	29	21
Charles E. Snow	"	41	22
John G. Hicks	"	35	15

Engine Company No. 3.

House, Fourth Street, near Cambridge.

Name.	Rank.	Age.	No. of Badge.
William F. Newman	Foreman	36	38
Edwin Winward	Asst. Foreman	38	39
Hiram Blood	Engineer	50	31
Elliot E. Alley	Fireman	46	30
James S. Casey	Driver of engine	46	33
Lorenzo H. Dale	" hose carriage.	40	34
John Casey	Hoseman	32	41
Walter Baker	"	28	42
Timothy J. Mahoney	"	34	36
William H. Murray	"	31	35
Louis J. Stanger	"	28	32
John S. Dooris	"	37	29

Engine Company No. 4.

House, North Avenue, near Russell.

Name.	Rank.	Age.	No. of Badge.
Edgar H. Locke	Foreman	35	53
William J. Hanna	Asst. Foreman	36	52
John E. Ricker	Engineer	38	45
Benjamin Young	Fireman	38	49
George E. Muzzey	Driver of engine	40	48
Sylvanus G. Griffin	" hose carriage.	35	46
John H. Griffin	Hoseman	29	55
Arthur C. Griffin	"	32	44
Josiah P. Parsons	"	34	43
George W. Gilman	"	25	54
Edward A. Hurd	"	32	51

Engine Company No. 5.

House, Inman Square.

Name.	Rank.	Age.	No. of Badge.
Francis P. Scanlan	Foreman	36	100
Conrad D. Kinnear	Asst. Foreman	43	101
John D. Thompson	Engineer	41	102
George W. McIntire	Fireman	27	103
Joseph P. Cartwright	Driver of engine	46	104
Francis P. Carr	" hose carriage.	38	105
John Fitzgerald	Hoseman	35	110
Frank C. Mullett	"	30	106
William T. King	"	26	107
George W. Butler	"	40	111
Hugh T. Barker	"	31	109
William H. Krump	"	31	108

Chemical Engine Company No. 1.

House, Central Square Building.

Name.	Rank.	Age.	No. of Badge.
Lewis C. Clark	Engineman	38	78
William H. Foss	Driver	43	76

Relief Engineer.

Name.	Rank.	Age.	No. of Badge.
Charles C. Conner	Engineer	32	16

Hook and Ladder Company No. 1.

House, Brattle Square.

Name.	Rank.	Age.	No. of Badge.
Charles Emerson	Foreman	37	69
John T. Mahaffy	Asst. Foreman	37	67
Albert S. Benson	Driver	38	72
James P. Ewell	Ladderman	46	62
Charles H. Waite	"	36	73
William Parks	"	38	77
William H. Lydston	"	35	68
Charles A. Sharon	"	33	64
Joseph B. Farmer	"	44	74
Warren H. Dow	"	32	71
Elisha W. Morey	"	35	70
William R. Mitchell	"	30	57
John A. Bartlett	"	49	65
John A. McDermott	"	32	58

Hook and Ladder Company No. 2.

House, Cambridge Street, corner of Portland.

Name.	Rank.	Age.	No. of Badge.
Thomas L. Hunter	Foreman	42	93
Joseph E. Chick	Asst. Foreman	32	87
Jeremiah R. Hobbs	Driver	35	81
Walter R. Marsh	Ladderman	45	83
Orvill W. Van Duzee	"	36	82
George H. Taylor	"	50	79
William Haley	"	34	86
James F. Dalton	"	45	95
Elbridge L. Wheeler	"	38	91
Timothy Ryan	"	35	85
John Goughan	"	40	94
Charles E. McMeniman	"	30	80
Albert Smith	"	28	90
Charles E. White	"	28	89

HYDRANTS.

Located in Ward One.

Appleton Street, corner Highland.
Ash Street, corner Acacia.
Baldwin Street, corner Emmons Place.
Banks Street, corner Flagg.
Banks Street, corner Cowperthwaite.
Banks Street, corner Grant.
Bow Street, corner Linden (post).
Brattle Street, opposite the estates of Messrs. Longfellow and Hastings.
Brattle Street, corner Ash.
Brattle Street, corner Hilliard.
Brattle Street, corner University Press estate.
Brattle Street, corner Lowell.
Brattle Street, corner Fresh Pond Lane.
Brattle Street, opposite Mount Auburn green-house.
Brattle Street, front of Mrs. Wyeth's estate.
Brattle Street, corner Willard.
Brattle Street, corner Story.
Brattle Street, corner Channing.
Brattle Street, corner Lake View Avenue.
Brattle Street, corner Hawthorn (post).
Brattle Street, near Brighton (post).
Brighton Street, corner Winthrop (post).
Brighton Street, corner Eliot (post).
Broadway, junction Cambridge Street.
Broadway, near junction Cambridge Street (post).
Broadway, corner Prescott Street.
Broadway, corner Trowbridge Street.
Broadway, corner Quincy Street.
Broadway, corner Ware Street.
Broadway, corner Ellery Street.
Buckingham Street, opposite Stevens's barn.
Buckingham Street, corner Concord Avenue (post).
Cambridge Street, corner Trowbridge.
Cambridge Street, corner Sumner.
Cambridge Street, front of Scientific School (post).
Cambridge Street, corner Quincy (post).
Cambridge Street, opposite Felton (post).
Cambridge Street, corner Ellery (post).
Chauncy Street, near Garden (post).
Chauncy Street, corner Langdon.
Church Street, corner Palmer.
Concord Avenue, corner Sparks Street.
Concord Avenue, opposite Craigie Street.
Concord Avenue, corner Follen Street (post).
Concord Avenue, corner Sparks Street (post).
Coolidge Avenue, between Mt. Auburn Street and Cambridge Cemetery Gate (2 posts).
Craigie Street, midway.
Craigie Street, near corner Sparks.
DeWolf Street, near Cowperthwaite.
Divinity Avenue, opposite Museum.
Dunster Street, corner South.
Dunster Street, corner Mt. Auburn.
Dunster Street, near Harvard Square (post).
Eliot Street, in elbow (post).
Eliot Street, corner Winthrop (post).
Ellery Street, corner Main.
Ellery Street, east side, midway between Broadway and Cambridge Street.
Elmwood Avenue, midway (post).
Everett Street, south side, midway between North Avenue and Oxford Street.
Fayerweather Street, corner Brattle.
Fayerweather Street, opposite Reservoir.
Foster Street, corner Foster Place (post).
Garden Street, near Chauncy (post).
Garden Street, corner Mason.
Garden Street, corner Wallace.
Grant Street, corner DeWolf.
Harvard Square, opposite Charles River Bank (post).

Harvard Street, junction Main (post).
Harvard Street, corner Remington.
Harvard Street, opposite Harvard Block (post).
Harvard Street, opposite Linden (post).
Harvard College grounds (three posts).
Hawthorn Street, corner Acacia (post).
Holworthy Street, opposite school-house (post).
Kirkland Street, near Baldwin, south side.
Kirkland Street, corner Trowbridge, south side.
Kirkland Street, corner Irving, south side.
Kirkland Street, corner Sumner, south side.
Kirkland Street, corner Quincy, south side.
Kirkland Street, opposite Memorial Hall.
Lake View Avenue, 500 feet from Brattle Street.
Lake View Avenue, near Brattle Street (post).
Lake View Avenue, corner Huron Street (post).
Lake View Avenue, on hill (post).
Lake View Avenue, near Engine House (post).
Langdon Street, in elbow (post).
Locust Street, corner Holworthy (post).
Main Street, corner Trowbridge.
Main Street, near Baptist Church.
Mellen Street, corner Oxford.
Mill Street, corner Holyoke (post).
Mill Street, corner Charles River.
Mt. Auburn Street, corner Brighton (post).
Mt. Auburn Street, opposite Athens.
Mt. Auburn and Bow Streets.
Mt. Auburn Street, opposite DeWolf.
Mt. Auburn Street, corner Willard (post).
Mt. Auburn Streets, corner Sparks (post).
Mt. Auburn Street, opposite McDonald's marble works.
Mt. Auburn Street, near railroad stables.
Mt. Auburn Street, near Lowell (post).
Mt. Auburn Street, corner Dunster (post).
Mt. Auburn Street, corner Holyoke (post).
Mt. Auburn Street, corner Athens (post).
Mt. Auburn Street, corner Banks (post).
Mt. Auburn Street, corner DeWolf (post).
Mt. Auburn Street, corner Story (post)
Mt. Auburn Street, corner Hilliard (post).
Mt. Auburn Street, opposite City Building (post).
Mt. Auburn Street, opposite Brewer (post).
Mt. Auburn Street, near car stables (post).
Mt. Auburn Street, opposite Bath (post).
Mt Auburn Street, near Coolidge Lane (post).
Mt. Auburn Street, corner Elmwood Avenue (post).
Mt. Auburn Street, corner Channing (post).
Murray Street, near Charles River.
Murray Street, corner Lyman (post).
North Avenue, corner Chauncy Street.
North Avenue, corner Shepard Street (post).
North Avenue, corner Holmes Place.
North Avenue, corner Jarvis Street.
North Avenue, front of burial-ground (post).
North Avenue, corner Church Street.
North Avenue, corner Garden Street (post).
Oxford Street, near Jarvis.
Oxford Street, corner Everett.
Phillips Place, corner Berkeley Street.
Prescott Street, corner Harvard.
Prescott Street, between Harvard Street and Broadway (post).
Putnam Avenue, corner Western Avenue.
Putnam Avenue, between Mt. Auburn and Main (post).
Putnam Avenue, corner Flagg Street (post).
Putnam Avenue, opposite Putnam Court (post).
Putnam Avenue, near Hews Street (post).
Putnam Avenue, corner Sands Street (post).

Quincy Street, midway between Harvard and Broadway (post).
Sands Street, opposite planing mill.
South Street, corner Dunster (post).
Sparks Street, corner Vassal Lane (post).
Sparks Street, corner Foster (post).
Sparks Street, opposite Charles T. Russell's.
Trowbridge Street, midway betwecn Main and Harvard (post).
Waterhouse Street, opposite Concord Avenue (post).
Waterhouse Street, opposite Follen (post).
Wendell Street, near Carver (post).
Wendell Street, midway between North Avenue and Oxford Street (post).
Willard Street, corner Foster (post).
Worthington Street, near engine house Water Works (post).

Located in Ward Two.

Amory Street, corner Summer.
Antrim Street, near Broadway.
Antrim Street, near Cambridge (post).
Antrim Street, midway (post).
Austin Street, corner Essex (post).
Austin Street, corner Prospect (post).
Austin Street, corner Temple (post).
Bigelow Street, midway between Main and Harvard.
Brewery Street, near Hastings (post).
Bristol Street, corner Portland (post).
Broadway, corner Highland Avenue.
Broadway, corner Hancock Street.
Broadway, corner Antrim Street.
Broadway, corner Tremont Street (post).
Broadway, corner Elm Street.
Broadway, corner Pelham Street.
Broadway, corner Dana Street.
Broadway, corner Ellsworth Avenue.
Broadway, corner Fayette Street.
Broadway, corner Amory Street.
Broadway, corner Norfolk Street.
Broadway, corner Boardman Street.
Broadway, opposite Thayer's Laboratory (post).
Broadway, near Broadway House.
Broadway, corner Clark Street (post).
Broadway, corner Third Street (post).
Broadway, corner Davis Street (post).
Broadway, corner Brewery Street (post).
Broadway, opposite Mason & Hamlin's building (post).
Broadway, near Sixth Street (post).
Broadway, corner Pioneer Street (post).
Cambridge Street, corner Harding.
Cambridge Street, corner Norfolk.
Cambridge Street, corner Willow.
Cambridge Street, corner Prospect (post).
Cambridge Street, corner Tremont.
Cambridge Street, opposite Fayette.
Cambridge Street, north side, near Springfield. [Avenue.
Cambridge Street, opposite head of Maple
Cambridge Street, corner McCabe (post).
Cambridge Street, corner Elm (post).
Cambridge Street, corner Winsor (post).
Cambridge Street, near Mr. Rafferty's house (post).
Cambridge Street, nearly opposite Ellsworth Avenue (post).
Centre Street, opposite Dana School-House
Clinton Street, near G. T. Gale's house (post).
Columbia Street, corner Lincoln.
Columbia Street, corner Market.
Columbia Street, corner Hampshire.
Columbia Street, corner Harvard.
Dana Street, corner Chatham (post).
Dana Street, between Broadway and Cambridge Street (post).
Davis Street, corner Broadway.
Elm Street, opposite Lincoln (post).
Elm Street, corner Market.
Essex Street, westerly side, midway between Harvard and Austin (post).
Fayette Street, 500 feet from Broadway.
Hampshire Street, corner Amory (post).
Hampshire Street, near Somerville line (post).
Hampshire Street, corner Portland (post).
Harvard Street, corner Pine.
Harvard Street, corner Hancock.
Harvard Street, corner Clark.
Harvard Street, corner Dana.
Harvard Street, corner Moore.
Harvard Street, corner Norfolk.
Harvard Street, corner Portland.
Harvard Street, corner Brewery.
Harvard Street, corner Clinton.

Harvard Street, near railroad crossing (post).
Harvard Street, between railroad crossing and Brewery Street (post).
Harvard Street, opposite Davis (post).
Harvard Street, corner Cherry (post).
Harvard Street, corner Winsor (post).
Harvard Street, opposite Elm (post).
Harvard Street, corner Essex (post).
Harvard Street, corner Prospect (post).
Harvard Street, between Prospect and Inman Streets (post).
Harvard Street, corner Bigelow (post).
Harvard Street, corner Lee (post).
Highland Avenue, east side, midway.
Houghton Street, corner Bolton, in Somerville.
Hunting Street, 400 feet from Cambridge.
Inman Street, near Austin.
Inman Street, corner Harvard.
Inman Street, corner Broadway.
Inman Street, opposite Summer.
Jefferson Street, corner Harding.
Jefferson Street, corner Warren (post).
Jefferson Street, opposite McCabe (post).
Lee Street, midway between Main and Harvard (post).
Main Street, corner Lee.
Main Street, corner Hancock.
Main Street, opposite Bay.
Main Street, corner Pelham (post).
Main Street, corner Essex.
Main Street, opposite Pleasant.
Main Street, corner Bigelow.
Main Street, Junction Harvard.
Main Street, corner Pioneer (post).
Main Street, opposite Rawson & Hittinger's.
Main Street, opposite Pearl (post).
Main Street, Gale & Wood's driveway (post).
Main Street, corner Third (post).
Maple Avenue, midway between Broadway and Cambridge Street.
Market Street, corner Union.
Moore Street, head of Hastings.
Norfolk Street, corner Hampshire.
Norfolk Street, corner Worcester.
Norfolk Street, head of Washington (post).
Oak Street, west side, near Somerville line.
Plymouth Street, corner York.
Porter Street, corner Bedford (post).
Porter Street, corner Harding (post).
Portland Street, opposite rolling mill (post).
Prospect Street, opposite B. Tilton's.
Prospect Street, corner Broadway.
Prospect Street, corner Hampshire.
Prospect Street, cor. Main.
Prospect Street, corner Gardner.
Prospect Street, opposite school-house, Somerville.
Prospect Street, corner Webster Avenue, Somerville.
Seckel Street, corner Webster Avenue (post).
South Street, opposite Willow, Somerville.
South Street, corner Gore, Somerville.
Tremont Street, near Wellington's house (post).
Tremont Street, near Hampshire (post).
Tremont Street, opposite Gardner (post).
Tremont Street, west side, 200 feet from Cambridge.
Union Street, corner Hampshire.
Ward Street, corner Horace, Somerville.
Webster Avenue, corner Elm.
Webster Avenue, corner Bristol.
Webster Avenue, corner Winsor.
Webster Avenue, corner Hampshire.
Webster Avenue, corner Plymouth.
Webster Avenue, corner Cambridge Street (post).
West Boston Bridge.
West Boston Bridge.
West Street, midway (post).
Winsor Street, corner Lincoln.
Winsor Street, corner Hampshire.
Winsor Street, corner Washington.
Winsor Street, near Somerville line (post).
Winsor Street, corner Broadway (post).

Located in Ward Three.

Binney Street, corner Ninth (post).
Binney Street, near railroad crossing (post).

Bridge Street, at Wellington's Wharf (post).
Bridge Street, at Sanborn's Wharf (post).
Bridge Street, corner Prison Point.
Bridge Street, corner Short.
Bridge Street, corner Short (post).
Bridge Street, corner Water.
Bridge Street, near Bay State glass house (post).
Bridge Street, north side, opposite Braman, Shaw & Co.'s.
Bridge Street, opposite Fourth (post).
Bridge Street, between Short and Water (post).
Bridge Street, near Cambridge (post).
Bridge Street, corner Water (post).
Bridge Street, corner East (post).
Cambridge Street, opposite First.
Cambridge Street, corner Carson.
Cambridge Street, corner Daily's Alley.
Cambridge Street, corner Third.
Cambridge Street, junction Bridge.
Cambridge Street, corner Sixth.
Cambridge Street, near railroad crossing (post).
Cambridge Street, opposite Seventh (post).
Cambridge Street, opposite No. 141 (post).
Cambridge Street, near Third (post).
Cambridge Street, corner Fourth (post).
Charles Street, corner Fourth.
Charles Street, corner Third (post).
East Street, corner North (post).
Eighth Street, corner Cambridge.
Fifth Street, corner Winter (post).
Fifth Street, corner Charles.
Fifth Street, corner Spring.
Fifth Street, corner Cambridge.
Fifth Street, corner Gore.
First Street, near Otis (post).
First Street, corner Spring (post).
Fourth Street, corner Winter (post).
Fourth Street, corner Winter.
Fourth Street, corner Cambridge.
Fourth Street, corner Vine.
Fourth Street, corner Thorndike.
Gore Street, corner Third (post).
Gore Street, corner Fourth.
Gore Street, corner Carson (post).
Gore Street, corner Carson.
Gore Street, corner Seventh (post).
Gore Street, between Fourth and Fifth (post).
Gore Street, between Fifth and Sixth [(post).
Munroe Street, corner Third (post).
North Street, corner East.
North Street, near Glass Company's cutting shop.
Otis Street, corner Third.
Otis Street, corner Seventh.
Otis Street, corner Ninth.
Potter Street, corner Ninth (post).
Prison Point Street, 50 feet north of ice sheds (post).
Prison Point Street, on railroad track, 300 feet from street.
Prison Point Street, near passenger track (post).
Prison Point Street, on railroad track, 600 feet from street.
Prison Point Street, 400 feet from Bridge Street.
Prison Point Street, near Bridge (post).
Prison Point Street, near ice house (post).
Second Street, corner Thorndike.
Second Street, corner Otis.
Second Street, corner Cambridge.
Sixth Street, corner Gore.
Sixth Street, corner Potter.
Sixth Street, corner Charles (post).
Sixth Street, corner Spring (post).
Spring Street, corner Second.
Spring Street, corner Third.
Spring Street, corner Fourth.
Spring Street, corner Ninth.
Third Street, corner Vine.
Third Street, near Charles (post).
Third Street, corner Bridge (post).
Third Street, corner Potter.
Third Street, opposite gas works (post).
Thorndike Street, corner Sixth.
Thorndike Street, corner Fifth.
Thorndike Street, near Woodbury's mill (post).
Thorndike Street, corner Second (post).
Vine Street, corner Fifth.
Vine Street, corner Sixth.
Water Street, near sugar-house.
Yard of J. P. Squire & Co. (post).
Yard of American Rubber Co. (post).

Located in Ward Four.

Austin Street, corner Douglass (post).
Austin Street, corner Norfolk (post).
Blackstone Street, west side, 100 feet from avenue (post).
Brookline Street, corner Allston.
Brookline Street, corner Hamilton.
Brookline Street, corner Valentine.
Brookline Street, corner Putnam Avenue.
Brookliue Street, corner Erie.
Brookline Street, corner Franklin.
Brookline Street, corner Chestnnt.
Brookline Street, near Henry (post).
Brookline Street, corner Decatur (post).
Brookline Street, corner Lopez (post).
Brookline Street, corner Watson (post).
Cherry Street, opposite Eaton.
Chestnut Street, corner Pearl.
Columbia Street, corner Austin.
Columbia Street, corner Washington.
Cottage Street, corner Pearl (post).
Eaton Street, corner Pine (post).
Erie Street, corner Pearl (post).
Erie Street, between Pearl and Brookline (post).
Fairmont Street, corner Andrew (post).
Franklin Street, corner Soden (post).
Franklin Street, corner Hancock (post).
Franklin Street, corner Bay (post).
Franklin Street, near the hill (post).
Franklin Street, corner Sydney.
Franklin Street, corner Magazine.
Franklin Street, corner Pleasant.
Franklin Street, near Putnam Avenue (post).
Front Street, junction State.
Front Street, corner Columbia (post).
Green Street, opposite Vernon.
Green Street, corner Putnam Avenue.
Green Street, corner Hancock (post).
Green Street, corner Bay (post).
Green Street, midway between Hancock and Vernon (post).
Green Street, corner Vernon (post).
Green Street, corner Pleasant (post).
Green Street, corner Western Avenue (post).
Green Street, corner Pearl (post).
Green Street, corner Brookline (post).
Grigg Street, corner Putnam Avenue.
Kinnaird Street, corner Bay (post).
Magazine Street, corner Cottage.
Magazine Street, corner Putnam Avenue.
Magazine Street, corner Warland.
Magazine Street, corner Auburn.
Magazine Street, corner Park.
Magazine Street, corner Upton.
Magazine Street, opposite Hamilton.
Magazine Street, opposite Allston (post).
Magazine Street, corner Florence.
Magazine Street, corner Green (post).
Main Street, corner Harrison (post).
Main Street, corner Columbia.
Main Street, corner Winsor.
Main Street, corner Norfolk.
Main Street, junction Austin.
Main Street, north side, opposite Kennedy's bakery.
Main Street, corner Washington.
Main Street, corner Brewery.
Main Street, corner Portland.
Osborn Street, corner State (post).
Osborn Street, corner Main (post).
Pacific Street, corner Sydney.
Pacific Street, near Albany.
Pearl Street, corner Lake.
Pearl Street, corner Allston (post).
Pearl Street, corner Putnam Avenue.
Pearl Street, corner Decatur.
Pearl Street, corner Auburn.
Pleasant Street, corner Florence (post).
Pleasant Street, corner Upton.
Pleasant Street, corner Somerset.
Pleasant Street, corner Park.
Pleasant Street, corner Prince.
Pleasant Street, corner Pleasant Place (post).
Pleasant Street, corner Chestnut.
Pleasant Street, corner Franklin (post).
Portland Street, corner Main (post).
Putnam Avenue, opposite Ballard Place (post).
Putnam Avenue, near River Street (post).
Putnam Avenue, corner River Street [(post).
Putnam Avenue, corner Walnut Court (post).
Putnam Avenue, corner Pleasant (post).
Putnam Avenue, between River and Pleasant Streets (posts).
Putnam Avenue, corner Waverly Street (post).

River Street, corner Franklin.
River Street, opposite Cottage.
River Street, opposite Laurel.
River Street, corner Blackstone.
River Street, opposite Fairmont.
School Street, corner Clark.
School Street, corner Portland (post).
School Street, corner Clark (post).
School Street, corner Moore (post).
Soden Street, corner Western Avenue.
Somerset Street, corner Andrew (post).
State Street, opposite Village (post).
State Street, near Howe's Factory (post).
Sydney Street, corner Allston.
Sydney Street, corner Putnam Avenue.
Sydney Street, corner Chestnut.
Sydney Street, corner Front (post).
Sydney Street, corner Green (post).
Washington Street, corner Brewery (post).
Washington Street, corner Clark.
Washington Street, corner Portland (post).
Washington Street, corner Moore (post).
Waverly Street, corner Allston (post).
Western Avenue, corner Howard Street.
Western Avenue, corner Kinnaird Street.
Western Avenue, corner Jay Street.
William Street, between Magazine and River Streets (post).

Located in Ward Five.

Arlington Street, 500 feet from North Avenue (post).
Beech Street, east side, 20 feet from Orchard.
Belmont Street, corner Montgomery (post).
Cedar Street, corner Spruce.
Cedar Street, opposite Norris.
Cedar Street, opposite hotel.
Coggswell Avenue, corner Mead Street.
Concord Avenue, corner Madison Street.
Concord Avenue, opposite Bond Street.
Concord Avenue, corner Walden Street.
Concord Avenue, opposite Eames estate (post).
Crescent Street, corner Sacramento (post).
Donnell Street, corner Garden.
Dublin Street, 525 feet from Spruce.
Dublin Street, 620 feet from Walden.
Dublin Street, corner Walden.
Dublin Street, corner Bolton.
Dublin Street, corner Railroad.
Fairfield Street, opposite Mr. Whitney's.
Forest Street, corner Frost (post).
Garden Court, corner Dublin.
Garden Street, opposite Bond.
Harris Street, corner Frost (post).
Harvey Street, opposite Montgomery.
Hollis Street, in the elbow.
Hubbard Avenue, opposite brick block.
Hubbard Avenue, corner Raymond Street.
Lambert Avenue, corner Walnut Avenue (post).
Lambert Avenue, corner North Avenue (post).
Lancaster Street, corner Lancaster Place (post).
Linnæan Street, corner Avon.
Linnæan Street, corner Bowdoin.
Linnæan Street, corner Raymond.
Milk Street, corner White.
Milk Street, near Somerville line (post).
Montgomery Street, 300 feet from Harvey (post).
Mt. Vernon Street, corner North Avenue (post).
North Avenue, near railroad bridge.
North Avenue, corner Coggswell Avenue.
North Avenue, corner Allen Street.
North Avenue, corner Dover Street.
North Avenue, 300 feet west of Tannery.
North Avenue, corner Sacramento Street.
North Avenue, opposite Linnæan Street.
North Avenue, corner Chester Street.
North Avenue, corner Arlington Street.
North Avenue, corner Rice Street.
North Avenue, corner Cedar Street.
North Avenue, opposite Tannery.
North Avenue, opposite No. 368 (post).
North Avenue, near Walcott Richardson's gate.
North Avenue, corner Beech.
North Avenue, corner Frank Street (post).
North Avenue, corner Day Street.
North Avenue, near Blake's blacksmith shop (post).

Norton Street, midway.
Orchard Street, near Davenport (post).
Orchard Street, opposite Tenney Court.
Oxford Street, corner Forest.
Oxford Street, opposite Eustis Court.
Oxford Street, corner Sacramento.
Pemberton Street, 500 feet from North Avenue (post).
Pemberton Street, corner Fairfield (post).
Raymond Street, south side (2), near Mr. Dresser's estate.
Reed Street, 250 feet from Harvey.
Reed Street, opposite school-house.
Rice Street, opposite L. L. Cushing's.
Richdale Avenue, corner Raymond Street.
Richdale Avenue, near Raymond Street (post).
Roseland Street, corner Frost.
Shepard Street, corner Avon.
Spruce Street, corner Hollis.
Spruce Street, corner Jackson (post).
Spruce Street, corner Reed.
Spruce Street, corner Montgomery.
Spruce Street, corner North Avenue.
Spruce Street, opposite school-house.
Spruce Street, corner Clay.
Spruce Street, corner Clifton.
Tannery Street (3), between North Avenue and Almhouse (posts).
Tuttle Street, opposite Ladd's barn.
Walden Street, corner Mead.
Walden Street, corner North Avenue (post).
Walden Street, corner Hubbard Avenue.
Wallace Street, in the elbow.
Washington Avenue, corner Dexter.
Washington Avenue, corner Foxcroft Street.
Wyeth Street, corner Garden.

RESERVOIRS.

Located in Ward One.

Bow Street, centre of square.
Brighton Street, corner Eliot.
Cambridge Street, corner Felton.
College Yard.
Garden Street, north end of Appian Way.
Junction Garden Street and Concord Avenue, opposite Arsenal.
Mt. Auburn Street, opposite the church.

Located in Ward Two.

Broadway, head of Tremont.
Cambridge Street, corner Webster Avenue.
Essex Street, corner Austin.
Harvard Street, opposite Broadway Park
Harvard Street, head of Cherry.
Harvard Street, corner Davis.
Harvard Street, corner Prospect.
Main Street, junction Broadway.
Norfolk Street, midway between Broadway and Hampshire.
Prospect Street, 175 feet north of Broadway.
Washington Street, corner Cherry.

Located in Ward Three.

Cambridge Street, 70 feet east of Third.
Gore Street, corner North Third.
Junction Bridge and Gore Streets.
New England Glass Company's yard.
Otis Street, corner Fourth.
Thorndike Street, corner Third.
Under New England Glass Company's building.
Under Lowell Railroad machine shop.

Located in Ward Four.

Junction Western Avenue and Pleasant Street.
Lafayette Square (2).
Main Street, corner Austin.
Main Street, corner Brookline.
Main Street, junction Western Avenue and River Street.
Pearl Street, corner Franklin.
School Street, corner Cherry.

Located in Ward Five.

North Avenue, near Engine House No. 4.

CAMBRIDGE FIRE-ALARM TELEGRAPH.

LOCATION OF BOXES.

2. Prison Point Street, cor. Bridge.
4. Gore, J. P. Squire's building.
6. Third, cor. Broadway.
7. Third, cor. Bent.
8. Thorndike, cor. Third.
9. Cambridge, near First.
12. Winter, cor. Third.
12. North, cor. Water (duplicate).
13. Fourth, Engine House No. 3.
14. Sixth, cor. Cambridge.
15. Vine, cor. Fifth.
16. Broadway, Greely's mill.
16. Potter, rubber factory (duplicate).
17. Washington, cor. Brewery.
21. Sydney, cor. Allston.
23. Pearl, cor. Auburn.
24. Brookline, cor. Valentine.
25. Main and Front (junction).
26. Main, cor. Osborn.
27. Clark, cor. Harvard.
28. Broadway, opp. Page's box factory.
29. Pine, cor. Washington.
31. Cambridge, cor. Harding.
32. Columbia, cor. Cambridge.
34. Hampshire, cor. Columbia.
35. Harvard, cor. Norfolk.
36. Main, cor Western Avenue.
37. Pleasant, cor. River (junction).
38. Magazine, cor. Lake.
39. Magazine, cor. Chestnut.
41. Pleasant, cor. Fairmont.
42. Blackstone, opp. Riverside Press.
43. Banks, cor. Flagg.
45. Franklin, near Soden.
46. Main, cor. Hancock.
47. Broadway, cor. Antrim.
48. Cambridge, cor. Hampshire (junction).
49. Cambridge, cor. Baldwin.
51. Broadway, cor. Ellery.
52. Mt. Auburn and Main (junction).
53. Mt. Auburn, cor. Holyoke Place.
54. Cambridge, Memorial Hall (south side).
56. Kirkland, cor. Sumner.
57. Oxford, cor. Mellen.
59. Harvard Square, Ramsay's drug store.
61. Brattle Square, City Building.
62. Mt. Auburn, cor. Hilliard.
63. Brattle, cor. Mason (junction).
64. Chauncy, cor. Garden.
65. North Ave., cor. Shepard.
68. North Ave., near railroad bridge.
69. North Ave., Engine House No. 4.
71. North Avenue, near Tannery.
72. Cedar, hotel building.
73. Spruce, near Bay State brick-yard.
74. Dublin, cor. Railroad.
75. Walden, cor. Raymond.
78. Concord Ave., cor. Sparks.
79. Brattle, cor. Sparks.
82. Brattle, cor. Elmwood Ave.
83. Mt. Auburn, near railroad stable.
87. Lake View Ave., near junction Concord Ave.
89. Concord Ave., near Hittinger ice houses.
91. North Ave., Union Railway car house.
92. Locust, cor. Cushing.
114. Ninth Street, Goepper Brothers' barrel factory.
125. Green, F. A. Kennedy's cracker bakery.

INSTRUCTIONS TO KEY HOLDERS.

Alarms to be given from the box nearest the location of the fire.

Don't give an alarm for a fire seen at a distance, unless assistance is called for.

To give an alarm, open the door, pull the hook to the bottom of the slot once, and let go. Each box contains a small bell, which, if heard before you pull, indicates that an alarm has been previously given ; and by listening at the box, you will learn the number of the box from which the alarm was given ; but in no case must you pull the box while the alarm is striking. After giving the alarm, remain at the box, so as to direct the firemen to the fire. Be sure that you lock the box before leaving it.

Citizens are requested to inform themselves where keys to the signal boxes are kept, signs suitably inscribed being placed over each box, giving the requisite information.

INSTRUCTIONS TO FIREMEN.

First alarm will be given by striking *three* or more rounds.

Second alarm will be given by repeating the first.

General alarm will be given by striking *three blows* on the gongs and bells.

In cases where hook and ladder companies only are wanted, the call will be given by striking *five blows.*

Companies not required to respond to first or second alarms will be notified of the extinguishment of a fire by *two blows* on the gongs, that their services will not be needed and that orders have been given to "make up." Should an alarm be given from any box while a portion of the department is engaged at a fire, the apparatus not in service will respond.

REPORT

OF THE

SUPERINTENDENT OF STREETS.

To the Honorable City Council of the City of Cambridge:—

GENTLEMEN,—I herewith submit for your consideration a report of operations in, and matters relating to, the Street Department for the financial year ending Dec. 30, 1882.

The appropriation for the year was	$67,000 00	
Additional appropriation	6,872 28	
Estimated revenue	400 00	
Transferred from Paving	1,081 19	
		$75,353 47
Expended as follows:—		
Printing	$19 00	
Expressing	9 76	
Harnesses and repairing	284 59	
Gas	144 27	
Piping	46 88	
Tools	51 30	
Building fence	114 29	
Sand and gravel	2,912 86	
Stone	3,860 78	
Labor with men and teams	55,028 35	
Iron work, repairing tools and wagons	557 12	
Hay, straw, and grain	5,106 55	
Lumber and cement	697 80	
Horse-shoeing	125 95	
Carriage hire	24 00	
Sign painting	31 75	
Car fares and tickets	33 00	
Wharf and land rent	145 00	
Directory	2 50	
Stable supplies	147 16	
Engine oil	11 15	
Amount carried forward	$69,354 06	

Amount brought forward	$69,354 06	
Bricks	240 50	
Repairing stamp	2 25	
Blacksmith supplies	852 93	
Hardware	511 35	
Horse doctoring	69 15	
Horses	1,525 00	
Fuel	244 92	
Cambridge Water Works	181 65	
Superintendent's salary	1,841 66	
Wagons and carts	530 00	
		$75,353 47

The streets of our city are not in as good condition as I would like to see them, and more money should be expended in order to put them in good repair, and I would recommend an appropriation of $150,000 for the coming year.

The following streets have been accepted: —

Bond Street, from Concord Avenue to Garden Street.
Henry Street, from Brookline to Sydney Street.
Cottage Street, from River to Magazine Street.
Henry Street, from Pearl to Brookline Street.
Walnut Avenue, from Lambert Avenue to Arlington.
Hurlbert Street, from Linnæan to Martin Street.
Martin Street, from North Avenue to Bowdoin Street.
Frost Street, from Forest to Harris Street.
Bristol Street, from Webster Avenue to Portland Street.
Hastings Square, from Chestnut to Henry Street.
Ninth Street, from Binney to Potter Street.
Potter Street, from Sixth to Ninth Street.
Washington Avenue, from Foxcroft Street 527.19 feet northwesterly.
Foxcroft Street, from Washington Avenue to Avon Hill Street.
Union Street, from Market to Hampshire Street.
Garfield Street, from North Avenue to Oxford Street.
Avon Hill Street, from Linnæan to Foxcroft Street.

Appropriation for paving		$11,500 00	
Additional appropriation		1,280 47	
		$12,780 47	
Transferred to Street Department (Repairs)	$1,081 19		
Transferred to Street Department (Watering)	342 09		
		1,423 28	
			$11,357 19

Expended as follows: —

Bricks	$588 77	
Labor	10 00	
Paving and flagging stones	4,945 78	
Sand and gravel	52 84	
Advertising	13 80	
Paving	5,746 00	
		$11,357 19

I still recommend paving Main Street. An appropriation of $25,000 should be made for the coming season.

Appropriation for bridges	$4,500 00	
Additional appropriation	139 77	
Transferred from Incidental Expenses	1,263 07	
		$5,902 84

Expended as follows: —

Labor	$1,865 59	
Lumber	108 88	
Advertising	5 25	
Hardware	14 10	
Iron work	3 00	
Contract to repair Brookline Bridge	3,820 46	
Extra work on Brookline Bridge	85 56	
		$5,902 84

The bridges are all in good repair. Brookline Bridge has been rebuilt at an expense of $3,906.02. I think that $2,500 will be needed for the coming year.

Appropriation for watering	$9,000 00	
Additional appropriation	385 75	
Estimated revenue	9,000 00	
Transferred from Paving	342 09	
Transferred from School Department (Books and Stationery)	152 88	
		$18,880 72

Expended as follows: —

Labor with men and teams	$13,311 58	
Hardware	80 34	
Lumber	28 38	
Cambridge Water Works' bills	165 54	
Repairing carts	176 70	
Water for the year	5,118 18	
		$18,880 72

Appropriation for shade trees and public grounds		$2,500 00
Additional appropriation		68 10
		$2,568 10
Transferred to Abatements and Discounts		1 74
		$2,566 36
Expended as follows:—		
Oil	$1 00	
Labor	1,269 02	
Flowers	80 88	
Trees	15 20	
Castings	33 79	
Hardware and repairing mowers	75 49	
Flag-staff and repairs	205 00	
Stencils	1 45	
Repairing wagon	19 00	
Rent of land on Rice Street	20 00	
Repairing fountains	10 27	
Painting	17 37	
Water	670 00	
Cambridge Water Works' bills	53 14	
Sods and gravel	84 75	
		$2,566 36

Schedule of Property belonging to Street Department.

Utensils for work on streets	$600 00
26 Horses	6,800 00
8 Double harnesses	300 00
4 Wagon harnesses	85 00
14 Chain harnesses	275 00
10 Saddles	150 00
36 Collars	85 00
21 Carts	2,000 00
1 Caravan	80 00
1 Set runners	60 00
2 Ploughs	5 00
Stable furniture and supplies	40 00
11 Snow ploughs	250 00
Stone crusher and engine	3,500 00
5 Street rollers	1,500 00
7 Sleds	500 00
8,000 Bricks	96 00
1,100 Yards cracked stone	2,475 00
Stone for cracking	225 00
Amount carried forward	$19,026 00

Amount brought forward	$19,026 00
Railroad track on Cambridge Street	400 00
4 Express wagons	250 00
Lot of round and square paving stones	140 00
Lot of edge and flagging stones	360 00
22 Watering carts	6,500 00
26 Horse blankets	100 00
4 Hand lawn mowers	25 00
1 Horse lawn mower	30 00
2 Pungs	100 00
2 Light wagons	50 00
Blacksmith's supplies and stock	300 00
	$27,281 00

Respectfully submitted,

B. W. WOODARD,
Superintendent of Streets.

REPORT

OF

THE CHIEF OF POLICE.

To the Honorable the Mayor and the City Council:—

GENTLEMEN, — I have the honor to submit my fifth annual report of the work of the Police Department for the year ending Nov. 30, 1882.

Whole number of arrests		1,343
Males	1,191	
Females	152	
Adults	1,019	
Minors	324	

Causes of Arrest.

Attempt to break and enter	2
Assault and battery	200
Assault, felonious	11
Assault on officers	19
Attempt to commit larceny	4
Attempt to rescue prisoners	3
Adultery	3
Breaking and entering	25
Bastardy	7
Common drunkards	11
Capias	1
Cruelty to dumb animals	3
Common railer and brawler	1
Disturbing public school	10
Disturbing the peace	46
Drunkenness	494
Delirium tremens	2
Disturbing public meeting	2
Evading car-fare	4
Embezzlement	2
Escaped prisoners	2
Forgery	1

False pretences	5
Fornication	5
Gambling	2
Insane	22
Keeping disorderly house	1
Keeping unlicensed dog	1
Larceny, simple	127
Larceny from building	17
Larceny from person	1
Lewd and lascivious	4
Malicious mischief	45
Misdemeanor	1
Neglected children	2
Peddling without a license	5
Robbery	6
Receiving stolen goods	2
Rescuing prisoners	3
Safe keeping	2
Suspicious persons	13
Stubborn children	10
Surety of the peace	24
Selling adulterated butter	2
Truancy	8
Violation city ordinances	50
Violation liquor law	57
Violation revenue law	2
Vagrancy	51
Wilful trespass	22
	1,343

Number of lodgers		741
Male	685	
Female	56	
Minors	40	
Adults	701	

Miscellaneous Business.

Accidents reported	101
Buildings found open, and secured	132
Cases investigated	327
Dangerous buildings reported	5
Dangerous chimneys reported	2
Dead bodies found	13
Defective cesspools reported	22
Defective drains and vaults reported	5
Defective fire alarms and clocks reported	2
Defective gas pipes reported	16

Defective hydrants reported	10
Defective lamps reported	1
Defective streets and sidewalks reported	493
Defective water pipes reported	42
Disturbances suppressed	238
Extra duties done by officers	263
Fire alarms given	16
Fires extinguished without alarms	18
Intoxicated persons helped home	56
Lost children restored	163
Sick and injured persons assisted	41
Stray teams put up	61
Street obstructions removed	15
Search warrants for liquors	132
Nuisances reported	3
Water running to waste	13
Value of property reported stolen	$6,477 17
Value of property recovered	$2,692 05

City Property in Use by Police Department.

67 badges	$100 50
55 badges for special officers	68 75
75 billies (short)	37 50
54 belts and billies for parade	54 00
23 buckets	10 00
2 book cases	20 00
3 book racks	3 00
4 bedsteads	16 00
Bedding and blankets	60 00
5 brushes	2 00
8 books	26 00
2 brooms	85
2 bureaus	3 00
1 boat and grapples	20 00
1 buggy	40 00
1 curry-comb and brush	50
8 clocks	65 00
76 chairs	70 00
1 coal hod	50
6 carpets	35 00
1 copying machine	12 00
9 desks	180 00
1 drop light	1 00
3 dust pans	75
3 feather dusters	2 50
Amount carried forward	$828 85

Amount brought forward	$828 85
2 horses	300 00
4 sets of harness	91 00
3 horse blankets	2 00
9 pairs handcuffs	12 00
Hand hose	13 00
1 hat rack	50
1 hectograph	6 00
1 ice hatchet and tongs	1 00
3 halters	1 00
1 interfering strap	50
1 pair of knee pads	1 00
2 straps and weights	1 50
1 pair of steps	1 00
6 cushions	3 00
3 thermometers	75
3 wash-bowls	1 00
21 lanterns	21 00
5 lounges	40 00
1 letter scale	75
1 pair of leg irons	4 00
2 lamps	1 00
8 mirrors	16 00
4 mats	8 50
3 maps	2 00
7 oil cans	3 00
10 pistols	15 00
1 pitchfork and shovel	75
1 pair of insect bellows	75
1 police van (large)	200 00
1 police van (small)	225 00
1 pair of runners	6 00
Ropes and stakes	100 00
3 robes	11 00
6 slates	1 30
20 spittoons	7 00
1 sleigh	30 00
1 sofa	5 00
4 stretchers	6 00
4 saddles and trappings	30 00
1 safe	200 00
1 shovel	50
1 stove	15 00
Telephone line	325 00
42 tin dippers	4 25
22 towels	5 00
Amount carried forward	$2,547 90

Amount brought forward	$2,547 90
8 tables	40 00
3 umbrella stands	3 00
6 waste baskets	2 50
5 water coolers	7 50
4 water pails	1 00
1 wagon	60 00
1 wagon jack	1 00
1 wardrobe	10 00
Total estimated value	$2,672 90

Total cost of the department for thirteen months: —

Appropriation and estimated revenue	$61,896 64

Expenditures.

Analyzing beer	$28 75
Animals, burying of	3 00
Advertising	3 50
Boat, care and use of	8 50
Buttons, straps, and wreaths	119 75
Carriage hire	1 50
Directories, and General Statutes of Massachusetts	26 40
Food for prisoners	74 49
Fuel	208 20
Express and teaming	81 36
Gas	600 04
Hardware and tools	13 46
Hay, grain, and straw	255 67
Harnesses and repairs	91 65
Horse-shoeing	49 63
Horse, boarding of	171 41
Medical attendance	38 70
Policemen, services of	57,354 86
Printing and bill posting	47 23
Procuring evidence	2 00
Repairs at stations	332 89
Repairs on telephone	16 75
Repairs on vehicles	24 75
Rent of telephone	105 56
Removing ashes	4 00
Salary of F. W. Hagar (chief)	1,733 33
Stations, cleaning	120 80
Supplies for stations	249 16
Travelling expenses and photographs	86 95
Telegrams	1 35
Water rates	41 00
	$61,896 64

Receipts.

From sundries	$5,367 15	
Expenditures		$61,896 64
Receipts		5,367 15
Balance, showing actual cost		$56,529 49

N. B. For the usual financial year ending Nov. 1, as heretofore, the cost of the department was : —

Appropriation and estimated revenue	$58,000 00
Expenditures	56,657 61
Balance unexpended	$1,342 39

In October last an addition of seven men was made to the force, making its maximum strength sixty-seven men. It now consists of a chief, one night captain who has the general supervision of the night force, three day captains, one in each district, one day sergeant and one detective, who report to the chief, three night sergeants having the general charge of the men on their beats, two sergeants and two patrolmen detailed in charge of the station houses during the night, one patrolman in charge of station five in the daytime, one court officer, and fifty-one patrolmen, divided into three reliefs, as follows : —

One day relief of ten men, with hours of duty from 8 A. M. to 6 P. M., one night patrol of twenty-two men, from 6 P. M. to 1 A. M., and one of nineteen men, from 1 to 8 A. M.

In addition to the day relief of ten men, five night men are detailed for forenoon, and five for afternoon, duty every day.

The members of the force of all grades have, with a few exceptions, discharged the respective duties assigned them in a very commendable and satisfactory manner, and they have from time to time been drilled in company movements, and have also been instructed as to their powers and duties as police officers. My earnest desire and endeavor has been that the force may reach and maintain a high standard of excellence and usefulness, and be a credit to our city.

The record of sickness in the force is remarkably high, the number of days' absence from duty from this cause being 591.

One death occurred in the department during the year: Otis Dennison of the second district, who died at his residence, 128 Spring Street, Oct. 10, of Bright's disease of the kidneys. Mr. Dennison had been a member of the force since January, 1873, performing his duties in a faithful and satisfactory manner, and was regarded with respect and esteem by his associates.

A determined effort has been made to suppress the illegal sale of intoxicating liquors, and I think I am safe in saying that it has been with a good degree of success. The difficulty of procuring evidence sufficient for conviction is such as few persons unacquainted with the business are aware of. Persons holding innholders' licenses have the privilege of selling to their guests on the Lord's day, and as the conditions of their licenses permit sales in any part of the licensed premises, it is an easy matter for them to transact business; all other licensed places are closed on that day. All cases of selling to minors coming to my knowledge have been investigated, and where sufficient evidence has been obtained, prosecutions have followed. Searches have also been made in 132 unlicensed places, and in 55 liquors were found. Thirty-two samples of what is known as "hop beer" have also been taken and analyzed; 18 of them were found to contain over three per cent of alcohol, but the excess was so slight in most cases that convictions have been rare.

There have been but very few cases of felony or crimes of the higher grades committed during the year, and in most of these cases the guilty parties have been detected and punished. In nine cases of breaking and entering that have been tried in the Superior Court, the aggregate imprisonment imposed was 37 years and 9 months.

A deadly assault and robbery was committed on the person of Charles S. Childs on the 14th of October, by two men in disguise, and on the 19th of the same month the persons supposed to be guilty of the crime were arrested, have since been indicted by the grand jury, and now await trial at the next term of the Superior Court. Most of the work required in working up this class of cases never meets the public eye, but is known only to the officers engaged in it. The

members of the department are entitled to my thanks for their support and prompt obedience to orders. I have also received many courtesies and favors from officers in all the surrounding cities and towns, for which I am under great obligations. To his Honor, Mayor Fox, and the Board of Aldermen, I return my sincere thanks for their confidence and support.

Respectfully submitted,

FREDERICK W. HAGAR,
Chief of Police.

REPORT

OF

THE SUPERINTENDENT OF LAMPS.

To the Honorable City Council of the City of Cambridge:—

The undersigned respectfully submits his annual report of the department for lighting streets, for the year ending Nov. 30, 1882.

The amount appropriated for the current year was $20,000.

The amount expended was as follows: —

For Gas		$13,636 86
Care of lamps and lighting		6,044 53
Posts and lanterns		232 91
Repairs		390 44
Expense of lighting Belmont district		116 75
Kerosene		114 04
Matches		34 99
Alcohol		46 00
Gas tools and putty		4 59
Printing		5 83
Sundries		7 50
Express		1 20
Superintendent's salary		412 50
		$21,048 14
Cash collected for damages to posts and lanterns, and paid into City Treasury		40 60
Leaving the net expenditures for the year		$21,007 54

The cost per lamp for the maintenance of the department for the year was $24.83.

The number of street lamps in the city is as follows: —

District 1	170 gas,	1 kerosene.
2	150 "	24 "
3	159 "	16 "
4	159 "	9 "
5	150 "	14 "
Belmont district		10 naphtha.
	788	74
Total		862

The increase in the number of lamps since my last annual report has been fifteen, all of which were put up at the expense of the petitioners.

The street lamps have been lighted 288 nights of the current year, averaging collectively $7\frac{1}{4}$ hours per night, or $9\frac{1}{6}$ hours for the all-night lamps, and $5\frac{1}{3}$ hours for the cross-street lamps.

The average cost of gas per night, for each lamp, was six cents; for each lamp burning kerosene, $1\frac{1}{2}$ cents.

Many complaints continue to be made of the darkness of the streets on the nights when it is presumed the moon will give sufficient light. This inconvenience is inherent in the system, which was adopted on the establishment of the lamp department, September, 1856, and has been continued to the present time, of lighting the lamps by the changes of the moon; and the only remedy is the measure I have heretofore recommended, and again renew (the plan pursued by the city authorities of Boston), of lighting the lamps at sunset and burning them all night. We should then have a certainty that under all changes of weather the streets would be well lighted and safe for travelling, should have a safeguard against burglary and accidents, — which are more liable to occur under the present system, — and should satisfy the expressed desire of the citizens for more light.

My opinion is that Cambridge is big enough to abandon the "moonlight schedules," as all the larger cities of the country have done, and light the streets when they need it, regardless of the age of the moon. For further information I would respectfully refer the City Council to my last annual report, which covers all the ground I could occupy by extending this report.

B. F. NOURSE,
Superintendent of Lamps.

REPORT

OF THE

SEALER OF WEIGHTS AND MEASURES.

To his Honor the Mayor and the Board of Aldermen of the City of Cambridge:—

GENTLEMEN, — In the performance of my duties I have visited, during the year ending Nov. 30, 1882, 410 places of business, and have

Sealed 834 scales.	Adjusted 111.
Sealed 3,499 weights.	Adjusted 214.
Sealed 50 dry measures.	Adjusted 4.
Sealed 168 liquid measures.	Adjusted 11.

The city scales throughout the city have been sealed and adjusted, and the usual amount of office work has been attended to.

The fees collected, amounting to $309.81, have been paid into the City Treasury.

State property in possession of the sealer: One balance; one set avoirdupois weights; one set liquid measures; one set dry measures; one brass yard-stick.

City property in possession of the sealer: One cabinet; one test scale and box; one lathe; one ton iron weights; one set brass weights in box; one five-pound, one twenty-five pound and two ten-pound iron weights, lot of tools and stamps for sealing and adjusting.

B. F. NOURSE,
Sealer of Weights and Measures.

REPORT

OF THE

MILK INSPECTOR.

To the Honorable Mayor and Board of Aldermen of the City of Cambridge:—

Gentlemen, — I herewith submit my third annual report as milk inspector.

Early in the spring of the present year, owing to a scarcity of feed and the high price of the same, the advanced prices of the preceding winter were continued during the summer months, the ruling price being seven cents per quart to families, and most stores selling at the same figure. These high prices were generally maintained by most of the dealers during the summer season until Oct. 1, when a further advance occurred, and milk is now being supplied to families at eight cents per quart, the stores usually selling at the same price, except when competitive trade is going on among dealers; the consequence is that most families are dealing directly with the milkmen for all they require, while heretofore all extra supplies were usually procured at the stores, and in many localities the price of milk was being used as an advertising medium to invite other trade while they furnished a cheap article, and it required considerable vigilance on the part of the inspector to insure protection to consumers.

The milk which is now being supplied to our citizens, I am happy to state, is of better average quality than at any other time since I have had the honor of holding the position of inspector, and I believe, as I have said in former reports, that dealing directly with the dealer is far preferable to patronizing the stores, the consumer getting the benefit in quality, and if any fault is to be found, it can be found directly with the milkman, and if good results do not follow they have the remedy in their own hands.

Many visits were made during the year at the residences of some of our citizens, on invitation to inspect milk, and the office was freely visited for information and with samples for inspection.

The number of wholesale dealers licensed the present year was 252, and the number of stores registered was 26, making 278 in all, and the sum of $139 was received as license fees.

Oleomargarine.

The duty of attending to this department, which was made incumbent on the milk inspector by the statutes of 1881, has taken much time in inspecting samples brought, and also in consultation with J. L. Babcock, Esq., the State assayer, who has always kindly lent his aid in determining the quality of samples brought for inspection and analysis.

Only one case of prosecution under this law has taken place in our city the past year, that of Gilbert A. Benner, of Boston, who was found guilty at the Police Court, and from which an appeal was taken to the Superior Court at the June term, and afterwards continued. It was finally settled Nov. 21, by the party pleading guilty, and the placing of the case on file.

This case was looked to with much interest by the trade, and was the means of determining the liability of dealers supplying the above article without furnishing the necessary label to customers as required by law, and without which all dealers in the article are held criminally liable. The party in question was a vender of butter, cheese, etc., who supplied customers from his wagon, and the evidence showed he was selling the above article as butter, and charging the average price of butter for the article sold, and furnished no label as required by law. The customer brought the complaint to the Police Court, at the same time calling on the inspector for analysis, and to prosecute. Much time and attention have been given to this department the past year in answering calls from parties who had suspicion of the article they were receiving, also in inspecting samples left for examination at my office and residence.

The amount of license fees received from the dealers in milk has been, by special order of the City Council, for the past three

years paid to the inspector as part of his salary, and I would respectfully request that an amendment be made to the ordinance increasing the salary of the inspector, who should pay the fees into the City Treasury in the same manner as all other city officers.

The average amount received from licenses issued for the past three years is about $175 per year, which, being added to the salary of the office, makes the total $350 received as compensation. This amount is not in proportion to the time necessary for the faithful performance of the duties of the office, with the additional duties imposed by the statutes in relation to oleomargarine, and for which no provision has been made.

Hoping that due consideration will be given the matter in the near future, and thanking you for kind recognition and support in the discharge of my duties, I am,

Respectfully yours,

JOHN H. FARRELL,
Milk Inspector.

CAMBRIDGE, NOV. 30, 1882.

REPORT

OF

THE INSPECTOR OF VINEGAR.

To the Honorable Mayor and Board of Aldermen of the City of Cambridge:—

Gentlemen, — My third annual report as vinegar inspector is herewith submitted.

During the year many samples of vinegar have been taken from stores in the different parts of the city to the office for inspection, and although my only test is the detection of the presence of sulphuric acid, I am happy to state that very few samples showed in any degree the appearance of the dangerous article, although the larger portion of them showed that large quantities of poor vinegar were being sold in our city, made of poor acetic acid and other miserable compounds, bought at a very low price, and in most cases sold at the price of good cider vinegar.

An article of such universal consumption should be pure and wholesome, and great care should be taken in selection of the article used, as, in the opinion of eminent authorities, many of the prevailing diseases, such as dyspepsia, liver and kidney complaints, and many others, are directly attributable to the use of unwholesome acids.

Our citizens are recommended to patronize honest dealers on whose judgment dependence can be placed as to the quality of their goods, as on it rest in a great measure the health and well-being of their patrons.

Respectfully submitted,

JOHN H. FARRELL,
Vinegar Inspector.

Cambridge, Nov. 30, 1882.

REPORT

OF

THE CITY ENGINEER.

OFFICE OF THE CITY ENGINEER,
CITY HALL, Dec. 27, 1882.

To the Honorable the City Council:—

GENTLEMEN, — As required by ordinance, the City Engineer herewith presents a report of the operations and expenses of the departments of engineering and sewers for the thirteen months ending Nov. 30, 1882.

Streets.

Streets have been laid out and accepted on the usual conditions, as shown in the following table. The most notable improvements in streets have been the paving of Prison Point Street from the Lowell Railroad passenger track to the bridge, and the widening of the causeway leading to Brookline Bridge to a uniform width of fifty feet (this work is now in progress and unfinished), from the estate of Alvan G. Clark to the bridge. Mr. Clark has released by deed to the city about two hundred square feet of land in aid of the improvement, the city removing his wall to the new line. This improvement is one which has long been needed, and affords much satisfaction to those having occasion to use this approach to the city, as well as those living in that vicinity. Plans of street railroad locations have been filed, as locations have been granted and tracks constructed.

Streets Accepted During the Year 1882.

STREET.					PLAN.		ACCEPTED.
Name.	From	To	Length in feet.	Width in feet.	Date.	By	
Bond Street.....	Concord Avenue...	Garden Street	476.46	50	Jan. 23, 1882.	Arthur Hodges.....	May 25, 1882.
Henry "	Brookline Street...	Sydney "	450.	40	Apr. 19, 1882.	Arthur Hodges.....	June 14, 1882.
Cottage "	River " ...	Magazine "	487.	40	Jan. 30, 1882.	Arthur Hodges.....	June 14, 1882.
Henry "	Pearl " ...	Brookline "	497.39	40	May 31, 1882.	W. A. Mason & Son.	July 7, 1882.
Walnut Avenue ...	Lambert Avenue ..	Arlington "	476.6	70	May 17, 1882.	W. A. Mason & Son.	Sept. 21, 1882.
Hurlbut Street.....	Linnæan Street....	Martin "	435.98	40	June 2, 1882.	Charles Morton	Oct. 19, 1882.
Martin Street	North Avenue.....	Bowdoin "	340.	40	June 2, 1882.	Charles Morton	Oct. 19, 1882.
Frost "	Forest Street	Harris "	283.	40	Sept. 1, 1872.	City Engineer.....	Oct. 19, 1882.
Bristol "	Webster Avenue ..	Portland "	504.06	40	June, 1882.	W. A. Mason & Son.	Nov. 16, 1882.
Hastings Square ...	Chestnut Street....	Henry "	300.	40	July 20, 1882.	City Engineer.....	Nov. 16, 1882.
Ninth Street	Binney "	Potter "	276.5	50	Sept. 30, 1882.	J. G. Chase	Nov. 16, 1882.
Potter "	Sixth "	Ninth "	396.5	50	Sept. 30, 1882.	J. G. Chase	Nov. 16, 1882.
Wash'ton Avenue..	Foxeroft "	Northwesterly	527.19	50	June 28, 1882.	W. A. Mason & Son.	Nov. 16, 1882.
Avon Hill Street...	Linnæan "	Foxeroft Street	593.85	40	Nov. 11, 1882.	W. A. Mason & Son.	Dec. 1, 1882.
Foxcroft " ..	Wash'ton Avenue..	Avon Hill "	401.75	40	Nov. 11, 1882.	W. A. Mason & Son.	Dec. 21, 1882.
Union " ..	Market Street.....	Hampshire "	349.42	30	Oct., 1881.	W. A. Mason & Son.	Dec. 21, 1882.
Garfield " ..	North Avenue	Oxford "	850.90	50	Nov. 25, 1882.	Charles Morton	Dec. 21, 1882.

Bridges.

All the bridges maintained in whole or in part by the city, are in good condition, the usual repairs only being required, except in case of Brookline Bridge, which has been thoroughly repaired, as recommended in my last report. The work was done in a thorough and substantial manner by John P. Perkins & Son, at a cost of $3,906.02. No action has been taken on the matter of widening the draw of the Third Street Bridge, asked for by Wm. H. Wood and others. The agreement by which the bridge on North Avenue over the Fitchburg Railroad, made a number of years ago, has been maintained by the city, has been declared by the city solicitor to be illegal, and the railroad company has been notified that it will be expected to maintain the bridge in the future.

Mill Pond.

Good progress has been made in filling this pond, and several sketches have been made showing proposed methods of laying out the territory when the filling is completed.

Sewers.

The length of sewers constructed the present year is 1.527 miles, making a total length of sewers in the city of 64.884 miles. The following table shows in detail the sewers constructed during the present year.

Sewers Constructed

Between Dec. 5, 1881, and Dec. 9, 1882.

LOCATION.			CONSTRUCTION.						Total Cost.
Street.	From	To	Built by	Material.	Size in inches.	Man-holes.	In-lets	Length in feet.	
Albany (Temporary).	Goff's Cove	Piano factory	City Engineer	Portland Pipe	9	0	1	291.0	$157 58
Albany	Main	Piano factory	Timothy Murphy.	Brick	24 by 30	4	56	826.4	3,495 93
Bay	Kinnaird	Northerly	City Engineer	Akron Pipe	10	0	5	99.5	87 40
Cambridge	Prescott	Near Becker's	City Engineer	Akron Pipe	10	0	4	100.0	77 62
Cambridge	Bridge	First	City Engineer	Brick and Wood	36 cir.	2	10	372.0	
First	Cambridge	Thorndike	City Engineer	Brick and Wood	36 cir.	2	21	524.0	9,058 64
Otis	First	Near Second	City Engineer	Portland Pipe	15	0	15	324.0	
Thorndike	"	Second	City Engineer	Portland Pipe	12	1	19	420.0	
Columbia	Cambridge	Somerville line	Patrick O'Connor.	Akron Pipe	12 and 10	3	41	521.1	609 88
Concord Avenue	Waterhouse	Westerly	City Engineer	Akron Pipe	10	2	8	202.7	322 94
" "	End of sewer	Wyeth	City Engineer	Akron and Portland.	10	1	6	100.5	125 10
Elm	Hampshire	Near Market	Timothy Murphy.	Akron Pipe	12	3	28	404.9	568 84
Franklin	End of sewer	Near Brookline	City Engineer	Portland Pipe	10	1	2	25.5	57 87
Hawthorn	Acacia	Toward Mt. Auburn	City Engineer	Akron Pipe	10	0	9	156 0	104 41
Kinnaird	End of sewer	Near Putnam Avenue	City Engineer	Portland Pipe	12 and 10	1	9	196.0	218 31
"	End of sewer	Angle	City Engineer	Akron Pipe	12	1	14	177.5	211 20
Laurel	Pleasant	Near River	City Engineer	Akron Pipe	10	2	19	269.8	355 97
Meacham	North Avenue	Somerville line	O. P. Roberts	Akron Pipe	12	2	27	428.0	511 43
Ninth	Binney	Near Potter	City Engineer	Portland Pipe	15	1	10	256.7	421 20
Norris	End of sewer	Southerly	City Engineer	Akron Pipe	12	0	4	53.0	66 19
Oak	Cambridge	Somerville line	Sam'l McCulloch	Portland Pipe	10	1	13	305.6	450 11
Portland	Washington	Near Main	Timothy Murphy.	Akron Pipe	12	1	19	259.2	412 91
Putnam, Sydney and Henry	Waverly	Henry	Sam'l McCulloch	Portland Pipe	15, 12, & 10	3	77	1,158.3	2,290 93
Short	Lowell R. R.	Toward Cambridge	City Engineer	Akron Pipe	10	0	4	44.	36 10
Third	Munroe	Southerly	City Engineer	Portland Pipe	15	0	6	59.	102 62
Third	End of sewer	Southerly	City Engineer	Portland Pipe	15	0	4	64.	101 69
Ware	Harvard	Northerly	Patrick O'Connor.	Portland Pipe	12 and 10	3	27	428.1	602 23
						34	458	8,066.8	$20,447 10

In the summer of 1881 one of the large gates of the Bridge Street sewer became unhinged. How this could occur was for some time a mystery, but was at last discovered to be caused by planks, which were detached from the bottom of the sewer and floated down to the gates, and examination showed that the spikes with which the floor was spiked down were very generally rusted off, and, as the gates were liable to a similar accident at any time, it was thought best to adopt some other means of securing the floor planks. This was done by putting in triangular corner pieces on each side of the sewer. These pieces were treenailed down to the wooden skew backs. This work could only be done when the tide was low (as the accumulated water in the sewer was too deep for men to work in), and even then in from twelve to eighteen inches of water; the pieces were prepared, so far as possible, outside of the sewer. They were secured in place by iron-pointed shores from the top of the arch, holes were then bored into the skew backs, and the treenails driven through a tube by an iron follower, the head of which came to the top of the tube, when the pin was driven home. The length of single line thus laid in the Bridge Street sewer was 5,905 feet, at a cost of ten cents per foot laid. Five ninths of this cost was repaid by the city of Somerville, the city of Cambridge having first paid for the work.

The Binney Street sewer, built on the same plan, was found in the same condition as the Bridge Street sewer, and was treated in the same manner, the length of single line laid being 5,976 feet, at a cost of nine and three tenths cents per foot laid. A small skiff carried the tools and lights, the stock being passed in at the nearest man-hole as wanted.

The flushing gates referred to in my last report have been put into the Binney Street sewer, and have done good service. The cost of each, including the setting, was about $100.

Early in the season the writer designed and had built a machine for removing deposits from the larger sewers, using the water running in the sewer with which to do the work, the principle being the same as that in machines used in the Paris sewers, while the construction is much more simple, and its cost very inconsiderable. It consists of a light frame of wood mounted on three wheels, two forward and one in the

rear of the frame, which is also fitted with handles like those of a plough, by which the machine is guided, while at the forward end is fitted an adjustable board about two feet high, shaped to fit the invert of the sewer, fitted with slides to an upright frame attached to the horizontal frame already described, to which, and also to the board, is also fitted a hand wheel, by means of which the board is raised and lowered. The operation is as follows: The machine being placed within the sewer, where the water may be running from six to eight or more inches in depth, the board is screwed down to the bottom of the sewer, where it is held until the water has risen behind the machine to a depth of eighteen or twenty inches, when the board is raised one, two, or three inches, more or less, as may be required. The water passes through the slot around the bottom perimeter of the sewer, and scours with great force, moving everything before it; the machine is rolled along as the bottom is cleaned, the pressure of water on the board being nearly sufficient to keep it up to its work, it needing only to be guided by the man in the rear. When the head is reduced so as not to be effective, the board is then screwed down again and the water allowed to accumulate, when the operation is repeated. Several of our larger sewers have been cleaned in this manner, which the expense of hand cleaning has prevented in preceding years. The lighter material is easily passed along by the accelerated current, while the greater difficulty is experienced from quicksands which it is necessary at times to have stirred up by a man in advance, with a short-handled iron rake or hoe; the accumulated heavy material may be removed at the nearest man-hole. Three men easily work the machine. The cost of the machine was $60, including a variety of boards for different shapes and sizes of sewers.

The right of way of the old sewer in Ninth Street, between Binney and Potter Streets and Broad Canal (the street having been discontinued and laid out anew), has been released to the American Rubber Company, which had purchased the land covered by the old street. On its petition a new sewer has been constructed in new Ninth Street.

The Ash Street sewer outlet has been extended to low-water mark, and is now covered at ordinary low water. This was done

in contemplation of improvements which have been recently made by the Longfellow Improvement Association, which has purchased the lands adjoining the sewer outlet, as well as from complaints from the near residents. When the Cambridge hospital grounds are improved, the Lowell Street sewer outlet, which passes through them, should be extended in a similar manner.

The district in the vicinity of Coggswell Avenue is very much in need of drainage. The ditch or water-course through which the drainage now passes into the Dublin Street sewer has been cleaned by the Sewer Department, and was found in a very filthy condition.

The plan proposed is to build a sewer from Dublin Street, through Railroad Street and private lands, to Coggswell Avenue, Mead, and Walden Streets. There are in this locality some fifty houses which are either without any or very imperfect drainage, through the old ditch or water-course. These sewers ought to be built the coming season.

Nothing has been done for the relief of the North Avenue and Shepard Street district, and the usual inconvenience has been felt.

Sewers in Cambridge, First, Otis, and Thorndike Streets have been built.

The old sewers in First, Otis, and Thorndike Streets were found to be in worse condition, if possible, than was supposed, and have in part been inoperative for a number of years, the sewage passing off through the porous filling material. Many difficulties were encountered in carrying out the work. Old wharf piles, and timbers, and bulk-heads were frequently met and had to be removed; while, from the porous nature of the filling, the tide rose in the trench with nearly the same freedom as in the river itself, a portion of the time requiring the aid of two six-inch steam pumps to hold the water down during the few hours which could be used at low water. This sewer is circular in shape and thirty-six inches in diameter. In Cambridge Street it is built of brick, in part on a wooden platform, with brick invert backing, in part of wooden invert, set in timber cradles, with brick arch. This form was continued until the cradle blockings reached a depth of six to eight feet, when a

pile and cradle foundation was substituted, and a full circle of timber instead of the brick arch. The cradles were put together with wooden treenails, and the staves of the sewer secured with galvanized iron spikes. In Otis Street the old piles were used, and a new platform and cradle laid. In Thorndike Street new piles were driven, and a platform and cradle were laid upon these for the foundation of the sewer. All the work on the four last-described sewers was done by the city, and in doing the work the Clarkson hoisting and conveying machinery was used for lifting and carrying the excavated material from the open cut to the completed work, the cuts being from twelve to eighteen feet in depth. It proved a very useful and economical method of handling material. Owing to the rapid extension of First Street, and the filling of lands adjoining, the extension of the sewer in First Street will very soon be required, to take the sewage from the Charles Street outlet, which will probably soon be cut off by the filling.

The sewer in Albany Street referred to in my last report has been built, the work having been done by contract by Timothy Murphy, the whole length requiring a stone or pile and platform foundation.

The usual number of drain-layers have been licensed, and about the usual number of permits have been issued to them. All sewer connections should be made in the presence of an inspector appointed by the Committee on Sewers.

The contract for building catch-basins was again awarded to Samuel McCulloch, his bid being the lowest offered.

The work of cleaning catch-basins, since the expiration of the contract with Cornelius O'Connor, has been done by the Sewer Department.

The report of the commission to consider and report on a system of sewerage for the Mystic and Charles River valleys, including such other localities as it might deem best, was made to the Legislature of 1882 in print. Several hearings were had before the appropriate committee, and the report was discussed by engineers and others interested, but so far as I am aware no further action than the acceptance of the report has been taken. It is very desirable that the matter be further considered, and a comprehensive system of metropolitan sewers

adopted, so that each city and town lying within the district could make all its work tell in the direction of one general plan.

The appropriations for sewers (construction) was	$24,459 11
Expended for sewers, as per table, including catch-basins, amount carried over from last year, and stock and tools on hand, and covering thirteen months.	$24,459 11
For sewers (maintenance), appropriation	$10,711 26
Expended for sewers (maintenance), including repairs on Bridge, Binney, Ash, and Gore Street sewers, cleaning catch-basins, flushing and cleaning, and care and repair of sewers, and covering thirteen months, including also amount carried over from last year	$10,711 26

Water Works.

The matter of an additional supply of water from the Shawsheen River was again presented to the Legislature. Several hearings were had before the proper committee, before whom our case was very fully and ably presented, and also very fully presented and argued in the House, by our own members and others interested, but without avail, and the matter was again referred to the next Legislature. Arrangements have been made again to present our case for consideration at the coming session. I would again call your attention to the importance of this question, and repeat what was said in my last report in relation to it.

"It is well known that Fresh Pond will not furnish a full supply, and has for a number of years been supplemented by the storm waters of Wellington Brook. This source must sooner or later be abandoned on account of the impurities it receives, and the impracticability of removing or controlling them. It is only under the most favorable conditions, such as melting snows and frozen ground, that water can be admitted with any degree of safety."

The plans for the high service have been carried out in a very thorough manner by Mr. Hiram Nevons, superintendent of the water works, the plan being the same as that described in my last report. This change in the manner of supplying water to the higher points of the city is thoroughly appreciated by those

who reside in the sections thus supplied, while those in the low service are (with one or two exceptions) equally well if not better supplied than before. The usual examinations have been made, and the works are generally in excellent condition. Some leakage still occurs at times through the culvert from Cider Mill Pond, and Richardson's Pond still discharges its overflow into Fresh Pond. These must eventually be removed by sewers. The improvement of the nooks on the westerly side of the pond is a matter of some importance. Should the water in the pond continue to fall much below its present level, the dams could be built during the present winter or spring months, and it is very desirable that this work should be done at an early day.

Cemetery.

The usual amount of routine work has been done at the cemetery, in laying out lots, giving lines and grades for lots and avenues, etc.

The field work of an entire resurvey of the cemetery has been completed, the surveys have been balanced, and a new plan on a large scale has been commenced. The need of such a plan has been felt for a number of years, as there now exist only detached plans of portions of the cemetery, while so many changes have been made that the older plans are very different from the present, and are of very little value.

Some negotiations have been made towards the purchase of more land for cemetery purposes, but nothing very definite has been arrived at. This is a matter of much consequence, as the remaining available land is almost nothing.

Fire Escapes.

Meeting with some opposition in cases requiring (in the opinion of the writer) more and better protection in case of fire, the whole matter relating to Sect. 8 of the building ordinance, regarding fire escapes and egress from buildings, was referred to the city solicitor, who, after careful consideration, has decided that the whole of Sect. 8 of our building ordinance is inoperative. This leaves the whole matter of fire escape and egress in the hands of the State authorities.

Office.

The usual demands upon this office from the various departments and committees for lines, grades of streets, cemetery work, water works, plans and specifications for bridges, bulkheads, buildings, sewers, and other work have been met as required. Five persons have been employed.

The appropriation for engineering for thirteen months ending Nov. 30, 1882, was	$6,727 29
Expenditures, including salary of City Engineer, pay of assistants, and other expenses incidental to the office, have been	6,727 29

Respectfully submitted,

WM. S. BARBOUR,
City Engineer.

REPORT

OF THE

COMMISSIONER ON WEST BOSTON, CANAL, AND PRISON POINT BRIDGES

For 1882.

The Commissioner for West Boston, Canal, and Prison Point Bridges submits for himself and associate his twelfth annual report of matters pertaining to the West Boston and Canal Bridges, and his seventh annual report on Prison Point Bridge.

West Boston Bridge.

It was anticipated, at the date of the last annual report, that there would have to be a considerable expenditure for repairs upon this bridge during the year.

Although sufficient repairs have been made to keep the bridge in good and safe condition for travel, no large expense has been incurred.

A portion of the bridge, on the Boston side of the channel, has been settling for some years, owing to the poor support afforded to the piling by a soft mud foundation. The condition of this section is so bad that it will have to be rebuilt in the spring.

The bulkheads for the entire length of the bridge are quite rotten, and will soon require extensive renewal or repairs. Only temporary repairs have been made upon them during the year.

The roadway and sidewalk pavements on the filled portions of the Cambridge side have been repaired. The condition of these pavements is such that it would be greatly improved by entirely relaying them. The expense would be quite large, and

the Commissioners have not felt justified in making this improvement so long as the pavements were in fair condition, as at present.

The draw has been provided with a new centre-pin in place of the old one, which was rendered useless by the breaking of one of its steel-plate bearings, and is otherwise in good condition.

The engine and draw machinery are in excellent order, and, with the exceptions which have been stated, the bridge, as a whole, may be considered in fair condition.

Canal or Craigie's Bridge.

The substructure of the oldest portion of this bridge has always required careful watching, and early in the spring an unusual amount of vibration under passing loads was noticed on a section comprising several bays.

A more careful examination for the purpose of ascertaining the cause of this unusual vibration resulted in the discovery of a number of piles, in four of the old bents, which were undermined, probably by the washing away of the bottom, and furnished, therefore, no support to the bridge superstructure. New piles were driven in these bents, and they are now stronger than ever before. The work was accomplished without stopping travel over the bridge.

The other portions of the old substructure are in about their usual condition, but are liable at any time to require similar treatment to that of the portion above described. The new portions of this bridge are in good order.

The draw and its appurtenant machinery are in good condition, with the exception of the engine, which will require a thorough overhauling and repairing before spring.

Prison Point Bridge.

The Cambridge approach to this bridge has been paved during the year. This was a much-needed improvement, to which the Commissioners have called attention in several of their former reports.

It has proved all that was anticipated, in the way of saving of wear and tear on the bridge, and increase of comfort for those travelling over this avenue. No extensive repairs have been required, either upon the bridge or draw, and they are now in excellent condition, and will require during the coming year only ordinary repairs.

EZRA PARMENTER,
Commissioner for City of Cambridge.

NUMBER OF TIMES THE DRAW IN WEST BOSTON BRIDGE HAS BEEN OPENED DURING THE YEAR.

December, 1881	149
January, 1882	11
February, 1882	10
March, 1882	43
April, 1882	192
May, 1882	210
June, 1882	237
July, 1882	166
August, 1882	165
September, 1882	167
October, 1882	130
November, 1882	169
Total for the year	1,949

CHARLES W. BLANEY, *Superintendent.*

NUMBER OF TIMES THE DRAW IN CANAL BRIDGE HAS BEEN OPENED DURING THE YEAR.

December, 1881	238
January, 1882	64
February, 1882	26
March, 1882	92
April, 1882	300
May, 1882	371
June, 1882	347
July, 1882	253
August, 1882	337
September, 1882	295
October, 1882	254
November, 1882	280
Total for the year	2,857

A. W. SMITH, *Superintendent.*

NUMBER OF TIMES THE DRAW IN PRISON POINT BRIDGE HAS BEEN OPENED DURING THE YEAR.

December, 1881	47
January, 1882	19
February, 1882	6
March, 1882	12
April, 1882	29
May, 1882	52
June, 1882	72
July, 1882	47
August, 1882	56
September, 1882	62
October, 1882	46
November, 1882	23
Total for the year	471

NATHANIEL W. STORY, *Superintendent.*

The expenses of the city of Cambridge for the care and maintenance of West Boston, Canal, and Prison Point Bridges for the year were as follows: —

EXPENDED (FOR 13 MONTHS).

For Buoy stone	$72 50
Carting dirt	102 12
Diving for making repairs	12 00
Furniture for engineer's house	10 00
Fuel	267 00
Gas	900 73
Hardware	141 16
Iron work	269 36
Labor, as per pay roll, including salaries of civil engineer and superintendents	2,374 25
Lumber	597 82
Oil, matches, and supplies	29 17
Paints	3 60
Piles	203 75
Pump	48 55
Paving	148 48
Repairs, general	669 40
Amount carried forward	$5,849 89

Amount brought forward		$5,849 89
Salary of Commissioner		541 66
Sand		6 25
Spars		9 00
Water rates		19 50
Watering streets and cleaning		478 07
		$6,904 37
Amount appropriated	$6,000 00	
Additional for November bills	867 38	
	$6,867 38	
Additional amount transferred to	36 99	
		$6,904 37

ANNUAL REPORT

OF THE

TRUSTEES OF THE CAMBRIDGE PUBLIC LIBRARY.

The Trustees have the honor to present their annual report, being the twenty-fifth since the foundation of the library, and the fourth under the title of the Cambridge Public Library. It comprises a resumé of the management of the library for the past year, and a statement of its present condition, and of some of its immediate requirements.

In the purchase of books the Trustees have endeavored, out of the limited means at their command, to select mainly books for general use. Of the sum annually appropriated for the library, not more than one fourth, on the average, is available for the purchase of books, the other three fourths being required for the payment of rent, salaries, binding, and other current expenses of the library. We are, therefore, obliged necessarily to limit our purchase of books to the current American literature, and to forego the acquisition of many valuable and important foreign works, unless they appear in an American reprint. As the ordinary expense of maintaining the library can at present be relied upon as nearly a fixed sum, any increase of our annual appropriation would allow us more money for the purchase of books, and it would be judiciously expended.

Since our last report the fourth supplementary catalogue has been printed and issued. It contains a complete list of the accessions to the library from April 1, 1880, to Dec. 1, 1881. The complete catalogue to Dec. 1, 1881, comprises the general catalogue of 1875, and the four supplements issued at intervals since that time. In this detached condition it is very inconvenient for reference. With the gradual growth of the library the

need of a compact catalogue, in book or card form, becomes more evident, and will finally be a pressing necessity. For this purpose an additional allowance in our appropriation will be necessary, and should be made as soon as the condition of our municipal finances will warrant it.

The five years' lease of the rooms occupied by the library expired on the thirtieth day of last April. The Trustees are now tenants at will of the premises, paying an annual rent of $1,000. The library has outgrown its present quarters, and a subject which has pressed itself seriously upon the attention of the Trustees during the past year has been the obtaining of more suitable quarters. In the first place, the building in which the library is now located is by no means fire-proof, and a fire might in a short time destroy our complete collection, much of which we should be unable to replace. To guard against any pecuniary loss which might ensue from such a calamity, we have adopted the only means at present in our power, by insuring the library to about the full extent of its money value.

In the second place, the resources of the library cannot be fully utilized for want of room. The book-room is already crowded with cases. We badly need a reading-room separate from the busy catalogue room, and from the newspaper and periodical room, to which persons who wish to use the library for purposes of investigation or study could resort without fear of causing inconvenience. If we could offer better accommodations in this direction, our reference library would be much more accessible to the public, and its use greatly encouraged and extended.

In view of the above facts, and being desirous to save the annual rent which forms so large an item of our expenditure, the Trustees during the past year appointed one of their number a committee to consult with the Committee on Public Property on the part of the City Council in regard to obtaining better accommodations. This committee has not made a final report. It seems doubtful, however, whether suitable rooms can be furnished in a city building, conveniently located, without involving considerable expense, if they can be provided at all.

In this respect Cambridge, the second city in the Common-

wealth in point of wealth, is far behind many of the towns and smaller cities. Such places as Newton, Haverhill, Brookline, Lexington, Concord, Belmont, and Woburn have fine library buildings, either in whole or in part the gifts of public-spirited citizens. Neither do we in the number of volumes in our library, or in the amount of our endowment funds, hold our proper rank. This condition of affairs may be due to some extent to the proximity of Harvard College library, which attracts the more scholarly portion of our community, and to the fact that only for three years past has the library been known by name as a public library. A city, however, of the size and importance of Cambridge, with its diverse and constantly increasing population, cannot afford to neglect this important department of public education. We call the attention of the friends of the library to its urgent needs, and express our belief that no man could more deservedly earn the lasting gratitude of all classes of the community than by contributing of his wealth to the advancement of an institution for the mental and moral improvement of his fellow-citizens.

The question of how to render the library more useful to the residents of the remote parts of our city has been considered. In the early part of the year 1881 the matter of establishing agencies of the library was referred to a committee of the Trustees, without power, however, to incur any expense. Under its direction, as an experiment, an agent was appointed at East Cambridge, who was authorized to receive cards, take out books, and deliver them to the applicant, the latter paying him a reasonable fee for this service. After a trial of about six months this plan, apparently for two reasons, proved a failure. First, many, especially young persons, were deterred from using this means on account of the expense, though the agent's charge for going to the library and back was only five cents. The second, and, in our opinion, the principal reason, was because the demand was chiefly for popular books. As there was not a sufficient number of duplicates to supply the demand, after repeated failures to obtain the books sought for, the applicants abandoned their attempts in disgust. This experience has clearly shown us that, satisfactorily to meet the wants of readers in the distant parts of our city, either branch libraries

should be established, or the number of duplicates of popular books in the present library should be increased, and free delivery made of books at some central point in the distant wards. In the city of Newton the daily delivery of books at agencies in the several wards, by express, has been tried for some years past, and the trustees report that the plan has proved very successful, and been the means of largely extending the benefits of the library. We are deterred from taking any action in this direction only by reason of the lack of pecuniary means at our command.

There has been much discussion lately as to the character of the fiction furnished by public libraries. Some have gone so far as to withdraw from circulation all fiction which is purely sensational and seems to serve no useful purpose. On this question of fiction there are many conflicting views, ranging from that of those persons who would exclude all but well-known standard works, to that of those, on the other hand, who would purchase the current fiction of the day, and leave it to their readers to say whether or not they should read it. We have endeavored to pursue a middle course. In a public library the demand for fiction is always quite large, and, while we have been obliged to recognize this taste to some extent, we have not purchased any book which we knew or suspected would have an evil influence upon the morals of a person of any age or sex. All new books are, so far as possible, carefully examined before introducing them to the public.

Furthermore, in order to sift from the library any books of doubtful character which might in the past have crept in unobserved, the librarian was, during the past year, authorized to withdraw from circulation, temporarily, for examination, any books supposed to be objectionable. This was done, and a list of them placed in the hands of the Trustees. Upon a careful reading of these books such as were deemed objectionable were permanently withdrawn from circulation, and the rest restored to their places on the shelves.

So far as we know, there is not in the library any immoral book. Whether it is wise for a person to spend his leisure hours in reading the fiction therein contained is a question for each one to decide for himself. The Trustees feel it their duty

to satisfy, so far as their means allow, the proper tastes of the different classes in the community, but they cannot take the place of parents and teachers, and reach individuals. They can act only in a general way, by carefully selecting the books which they offer to the public, and by furnishing guides to the best and most profitable literature.

With the co-operation of the teachers and parents of the city it is undoubtedly possible to improve the reading of the young. We observe that the School Committee has just passed an order instructing the Superintendent of schools to prepare a list of books suitable for the pupils, both for general reading and in connection with their courses of study. We hope that this measure may prove successful in drawing the attention of our school children from stories of mere passing interest to works of biography, travels, history, and standard literature, not less entertaining and of lasting benefit. We will gladly receive any suggestion which may be made to us to assist in carrying out this purpose so far as lies in our power.

The growth of the library during the past year has been a comparatively small one. Eleven hundred and eighteen books were purchased, of which number 794 were new ones, and 324 were to replace those that had become dilapidated and unfit for further use. It will thus be seen that the library is fast wearing out, and that much of our expenditure for books goes merely towards the preservation of the library.

Many readers are undoubtedly at times disappointed in failing to procure certain books upon application, or even after repeated applications. This failure is not surprising when we compare the number of our subscribers with the number of books in our library, and consider that we have only in a few cases duplicates of the most popular books. As the ratio of our readers to the number of books is constantly increasing, it becomes continually more difficult for the average reader to obtain the average book.

It will be noticed that our annual circulation has, for the past few years, constantly diminished. This, however, is the experience of almost every library in the country. Many causes probably conduce to this, but it is not, in itself, an indication of lessened interest in, or usefulness of, the library. It may, and

undoubtedly does, signify that a better and more instructive class of books, requiring more time for their perusal, is being read.

The following statistical tables give the details of the working of the library during the past year, and its growth and present condition: —

Books Issued.

First quarter	23,199
Second quarter	22,020
Third quarter	15,308
Fourth quarter	18,407
Total for the year	78,934
Total issue for 1881	82,850
Decrease in 1882	3,916
Largest issue for any day (Feb. 25)	602
Average issue per day	257

Accessions.

By purchase, including those bought with the Fay legacy	748
By gift	46
Total	794
Number of books in the library at close of 1881	13,770
Total now in library	14,564

Miscellaneous.

Books replaced, worn out	324
Books covered with paper	9,639
Books lost	3
Postals sent for return of books overdue	2,289
Cards issued to subscribers during the year	1,075
Total number of cards now in use by subscribers	9,344

Donors.

Hon. Wm. Claflin	22	R. J. Everett	1
Hon. S. Z. Bowman	2	State of Massachusetts	6
C. D. Wright	1	Cobden Club, England	3
C. F. Wyman	1	City of Cambridge	1
S. W. McDaniel	1	United States	3
Sumner Albee	1	Unknown (sent by mail)	1
Joseph Dalton	1		—
Chas. F. Walcott	1	Total	46

Receipts.

From fines	$127 87
From sales of catalogues	15 37
Total	$143 24

This amount has been paid into the City Treasury, as required by the ordinance.

The Fay Legacy.

This remains, as heretofore, invested in the city's note. The amount is one thousand dollars, and it yields six per cent a year, which is applied to the purchase of books, as required by the will of the donor.

Paige's History of Cambridge.

No exchanges of this work have been made this year. The number now in the library is the same as at the time of our last report.

Expenditures for Thirteen Months to Dec. 1, 1882.

Salaries. — Librarian, assistants, janitor, etc.		$2,514 44
Rent of rooms		1,250 00
Books		1,389 33
Periodicals and newspapers		157 12
Gas, $298.08; furniture and repairs, $79.99		378 07
Printing, $456.72; stationery, $67.64		524 36
Binding and repair of books		554 75
Insurance, $105; ice, $8; water rates, $20		133 00
Sundry expenses. — Expressage, postage, plumbing, etc.		26 45
		$6,927 52
Amount of regular appropriation	$6,300 00	
Amount of additional appropriation for November bills	628 49	
		6,928 49
Balance unexpended		$ 97

It is now almost twenty-five years since the city assumed the maintenance of the library. During this time $67,464.27 have been expended for its support, and of this sum $21,411.88 have been expended for books.

The Board requests that the sum of $7,500 be appropriated for the purposes of the library for the ensuing financial year.

Respectfully submitted,

SAM'L L. MONTAGUE,
GEORGE H. FOLGER,
J. W. FAIRBANKS,
JOHN S. MARCH,
H. B. GOODWIN,
JOHN CONLAN,
SAMUEL W. McDANIEL,

Trustees of Cambridge Public Library.

Cambridge, Dec. 20, 1882.

REPORT

OF THE

TRUSTEES OF THE DOWSE INSTITUTE.

To the Honorable City Council of Cambridge:—

The Board of Trustees of the Dowse Institute respectfully transmits an attested copy of the annual report of its treasurer, which contains an exact account of the receipts and expenditures for the year 1881-2.

A course of eight lectures was given in Union Hall; one lecture each by Hon. Carl Schurz, Prof. W. H. Niles, and Mr. Wm. Parsons, and five lectures by Mr. George M. Towle.

Respectfully submitted,

W. W. WELLINGTON,
W. A. BULLARD,
FRANK A. ALLEN,
JAMES A. FOX,
GEO. H. HOWARD,
Board of Trustees.

Cambridge, Dec. 20, 1882.

REPORT

OF THE

TRUSTEES OF THE BRIDGE CHARITABLE FUND.

In presenting its sixth annual report the Board has little to add to what has heretofore been stated in relation to this fund.

The amount originally given to the city by Levi Bridge was $891.83. To this sum an equal amount was added by his kinsman, Samuel J. Bridge, and the total sum thus produced was deposited in the Cambridgeport Savings Bank, where it has since remained, the interest being added semi-annually. The entire amount of the fund, with interest accumulations, to Jan. 19, 1883, will then amount to $2,223.61. As stated in the report for the year 1881, the sum of $91.52 was payable at the end of the year to the Overseers of the Poor, in accordance with the provisions of the instrument giving the fund to the city. As this sum would have been but a slight contribution in aid of our city poor, it was adjudged by the Board of Overseers that the wishes of the donor would be best carried out if the amount were added to the fund, and the same was accordingly given by that board to increase the principal, thus making the fund at the beginning of the year 1882 amount to the sum of $2,137.27.

The amount to Jan. 19, 1883, will be	$2,223 61
The amount to Jan. 19, 1882, was	2,137 27
Increase	$86 34

The care of this contribution to the needs of our deserving poor calls for slight responsibility on the part of the Trustees. To the oft-repeated wish that the charitable act of the original donor may be followed by similar gifts from other benevolent persons, this Board can only add its fervent aspiration in the same direction.

JAMES A. FOX,
S. S. SLEEPER,
GEO. H. HOWARD,
} *Trustees.*

REPORT

OF THE

TRUSTEES OF THE SANDERS TEMPERANCE FUND.

This Board herewith presents its eighteenth annual report.

Mr. Alonzo Stewart has been continued in service as Missionary, and has faithfully labored in behalf of the unfortunate class for whose benefit the fund was bequeathed.

The usual meetings of the Board have been held from time to time during the year, and the Missionary has caused full information of his doings to be laid before the Trustees, by means of a daily record kept by him. His office hours at the City Hall have been discontinued, as no calls were made upon him, and it was felt that the proper exercise of his duties required his presence during those hours at other places to be sought out by him. He has continued to attend the daily sessions of the District Court, and has doubtless been instrumental of much good through his unceasing efforts in behalf of those suffering from intemperate habits.

The fund, as heretofore, remains in the hands of the City Treasurer, it being invested in a city note for $10,000, payable to the order of the Trustees. The amount received for interest constitutes the salary of the Missionary, and is payable to him.

Appended hereto is a detailed report of the work performed by Mr. Stewart.

JAMES A. FOX,
NATHAN G. GOOCH,
GEO. H. HOWARD,
JOHN CLARY,
} *Trustees.*

CAMBRIDGE, Dec. 27, 1882.

REPORT

OF THE

SANDERS TEMPERANCE FUND MISSIONARY.

To the Trustees of the Sanders Temperance Fund: —

GENTLEMEN, — The rendering of the annual accounts of the various departments of the city government reminds us of the speedy passage of time, and invites us to a more earnest and a nobler performance of the responsible duties to which our Heavenly Father has called us.

The truth that what we do for our brother man must be done speedily, for the night cometh when no work can be done, has been most painfully demonstrated during the past year by the entering into rest of so many of our noblest and most earnest workers.

I have endeavored, with the advice and counsel of the Trustees, to carry out the wishes of the noble founder of this charity.

My relations with the court, and the entire police force, have been exceedingly pleasant, for which I tender them my sincere thanks.

I have made direct and personal appeals to more than 1,000 persons addicted to the use of strong drink: have taken pledges of total abstinence from 80 persons arrested for intoxication: have attended Sunday-school services in House of Correction, 50: attended temperance meetings, 152: attended sessions of Police Court, 296: distributed pages of temperance and religious literature, more than 23,788.

This is what appears upon the surface; undoubtedly something is concealed below, and will not appear until that day when the

secrets of all hearts will be revealed. That some good has been accomplished I cannot doubt, but when I compare the much to be done with the little done, the view is not cheering.

When we consider that intemperance is emphatically a social evil, with power to destroy more of human hope and happiness than any and all other vices combined, why do we not unitedly cry out against it, saying, "You shall no longer touch the manly form of our brother and turn it to corruption or breathe upon his intellect and blot out the divine lineaments forever"?

We can hope for little advance in reform while the hydra-headed monster appears boldly along all our streets with the magic word "Licensed" flaming from his burning brow.

But we wait in patience and in hope, for —

"Though the mills of God grind slowly,
Yet they grind exceeding small,
Though with patience He stands waiting,
With exactness grinds He all."

Respectfully submitted,

ALONZO STEWART,
Temperance Missionary.

December 28, 1882.

ANNUAL REPORT

OF

THE FISH OFFICERS

FOR 1882.

To the City Council of the City of Cambridge:—

THE undersigned, fish officers appointed by your honorable body in joint convention, in conformity to special law, would most respectfully submit the following report: —

The laws relating to the fisheries, so important to the infant colonies, were among the first enacted, dating from 1623 and continued to the present time. The law under which fish officers are appointed was first adopted in 1789, and is entitled —

"An Act to prevent the destruction of fish called shad and alewives in Mystic River, so called, within the towns of Cambridge, Charlestown, and Medford."

It commences as follows: —

"Whereas the fishery in Mystic River, in the county of Middlesex, if properly regulated will be of great public utility, as it serves to promote the cod fishery and is also of advantage to the particular towns through which the river runs, affording, in some measure, subsistence and support to the inhabitants thereof, and it is therefore necessary to be preserved:"

Then follow seven sections to prevent the catching of the fish on any but certain days specified, and penalties for polluting the stream, or in any other manner obstructing the fish in their passage to or from the ponds, their natural spawning haunts.

The officers find that until a comparatively recent period our municipality obtained a large revenue from the fish caught in Alewife Brook, the net proceeds from that source in 1856 being $904.

All this has changed, a condition of things due to the sewage emptied into the brook, but mainly to the fish being prevented from entering Fresh Pond, by a solid dike across the outlet, in which is a gate ostensibly to conform to the law which it practically violates, in order to prevent the filthy waters of the brook from being carried into Fresh Pond by the inflowing tide. We, therefore, believing under the circumstances that our appointment under the act had become of a somewhat farcical nature, and that the act should be repealed, requested the city solicitor to reply to the following questions, which, with his replies, we furnish as giving a condensed view of the entire question, the solution of which belongs to the City Council: —

J. W. Hammond, City Solicitor: —

Dear Sir, — We are instructed by the fish officers to obtain your opinion upon the following matters connected with our official duties, as defined in Sections 1 and 2 of Volume I. of Massachusetts Special Laws, page 238; said act being an act to prevent the destruction of fish called alewives, in Mystic River, so called, within the towns of Cambridge, Charlestown, and Medford, and for repealing all laws heretofore made for that purpose.

We desire to call your special attention to the following extract from Section 2: —

"And no person shall at any time place any obstruction in said river, stream, or ponds, which may obstruct or hinder any shad or alewives from passing up or down said stream. And no person shall be permitted, by disturbing the waters aforesaid, or by any other means to restrain or interrupt any of these fish in their passage up or down said river and stream. And every person so offending in either of these particulars shall, upon conviction, forfeit and pay the sum of three pounds for every such offence."

First. Can we, under either of the above sections, or those of which they may form the basis, secure the conviction of the Niles Brothers, or any other party or parties who empty into Alewife Brook substance or substances which would and do so contaminate the waters therein as to prevent the passage of alewives through said stream, or destroy them in their passage to and fro, or so pollute the waters as to prevent the above fish from entering Fresh Pond, their natural spawning ground?

Secondly. In order to secure a conviction under the law and act under which we were appointed, is it necessary that we should prove that when the aforesaid substance was placed or emptied in said Alewife Brook or River said brook or river contained alewives?

Thirdly. Have we as fish officers at the present time any legal means, under the acts by which we were appointed, to prevent the aforesaid

pollution, and, if not, is it not advisable to petition the General Court for a repeal of those obsolete laws under which we were appointed and the non-enforcement of which tends to bring such laws into public contempt?

DANIEL A. BUCKLEY,
MICHAEL CORCORAN,
A Majority of the Fish Officers of the City of Cambridge.

CITY OF CAMBRIDGE,
OFFICE OF CITY SOLICITOR, Dec. 12, 1882.

To the Fish Officers: —

GENTLEMEN, — I have considered the subject matter contained in your recent written communication to me, and respectfully reply as follows: —

First. I am decidedly of the opinion that the special statute to which you refer, establishing the office you now hold, and defining its duties and powers, does not apply to cases where the fish are injured simply by a pollution of the waters of the Mystic River and the streams running into it, but only to cases where the passage of the fish is hindered or obstructed by something by reason of its size or shape, as for instance a net, seine, fence, dam, or weir. It follows that, unless the "Niles Brothers" place something in the water which by reason of its size or shape hinders or obstructs the passage of fish, there is no peculiar duty resting upon you as officers chosen under that statute to prosecute them or to cause the removal of what they place in the water.

Second. I am also of the opinion that in order to secure a conviction under St. 1868, Ch. 128, Sect. 2, which, so far as I am aware, is the only statute which makes it a penal offence to cause to flow into Alewife Brook any substance which may destroy or injure the fish therein, it is necessary to show that there are fish therein.

Third. I have examined the general and special statutes, and find no general statute, and no special statute except St. 1868, Ch. 128, above named, which makes it a penal offence, so far as injury to fish is concerned, to pollute the waters of Alewife Brook.

Fourth. The statute under which you are appointed is still in force, and whenever occasion arises you are required to perform the duties it imposes upon you. It does not reach, however, the case of simple pollution. To prevent injury to the fish from that cause, additional legislation is necessary.

Yours truly,

J. W. HAMMOND.

REPORT

OF THE

CAMBRIDGE WATER BOARD

FOR 1882.

To the Honorable City Council of the City of Cambridge:—

IN accordance with the requirement of the city ordinance, the Cambridge Water Board herewith submits to you its eighteenth annual report.

Total Cost of the Works.

Cost of the Water Works, Nov. 30, 1881, as per last year's report	$1,728,655 35
Expended on construction account during the year ending Nov. 30, 1882	16,959 12
Making the total expenditure	$1,745,614 47

Water Bond Account.

Whole amount of bonds issued	$1,714,900 00
Less amount paid from the Water Loan Sinking Fund	236,400 00
Leaving unpaid water loan	$1,478,500 00
Deduct from this the value of the Water Loan Sinking Fund, as per the Trustees' account	483,137 81
Leaving amount yet to be provided by the Sinking Fund to extinguish the balance of the water loan	$995,362 19

Statement showing in brief the transactions on account of the water works for the year ending Nov. 30, 1882.

Received.

From water rates	$178,729 82	
Less water rates refunded	1,299 02	
		$177,430 80
Shutting off and letting on water, and fines		610 35
Rent of house		144 00
From supply account		3,832 51
Balance, showing loss in 1882		436 15
		$182,453 81

Expended.

For construction account, 13 months	$16,959 12
For maintenance account, 13 months	28,870 06
For supply account, 13 months	3,684 63
Interest on water loan	88,585 00
Paid into the Sinking Fund	44,355 00
	$182,453 81

Comparative Receipts.

Water rates for the year ending Nov. 30, 1882	$177,430 80
Water rates for the year ending Nov. 30, 1881	170,062 73
Showing gain in the year 1882	$7,368 07

We would call attention to the fact that this year's accounts show the amount of water loan outstanding, less the Water Loan Sinking Fund, to be less than one million dollars, and also that there is a steady increase in the receipts of the annual water rates.

Water Supply.

The total amount of water pumped during the year was 903,234,909 gallons, being a daily average of 2,474,616 gallons. In 1881 the total amount pumped was 902,319,300 gallons, the daily average being 2,472,108 gallons, showing the increased amount pumped in 1882 over 1881 to be only 915,609 gallons.

In these days, when we hear so much from other places in regard to waste of water, and the best means to prevent it, we wish to call your particular attention to these figures, as showing the excellent condition and comparative economy of our water works in this respect.

The total amount of water pumped as above, 903,234,909, shows a daily average for each inhabitant of about 44.19 gallons, estimated on a population of 56,000.

If we now take the whole number of gallons	903,234,909
And deduct from this the amount sold by meter, and used in watering the streets, say	233,497,905
We have left for domestic use	669,737,004
Showing the daily average for each inhabitant for domestic purposes to be about	32.76

This is an improvement on our excellent record of last year, when the total average per inhabitant we made 46.75 gallons, and the amount for each one, for domestic purposes, 36 gallons. For the purpose of comparison we append the daily average of other cities, taken from their reports.

Daily consumption per inhabitant of other cities, taken from their reports and other sources.

	Gallons.		Gallons.
Pittsburg	100	Cincinnati	53
Toledo	65	Erie	72
New York	90	Baltimore	50
Detroit	88	Lowell	44
Minneapolis	64	St. Louis	44
Patterson	117	Augusta	104
Chicago	80	Poughkeepsie	69
Nashville	138	Meriden	54
Quebec	60	Jersey City	83
Hartford	80	Cleveland	43
Reading	75	Allentown	55
Wilmington	83	Binghamton	98
New Haven	75	Washington	127
Albany	70	Worcester	48
Lawrence	47	New Bedford	75
Springfield	66	Nashua	74
Salem	61	Kalamazoo	67
Buffalo	63	Saratoga	108
Denver	59	Des Moines	57
Boston	60	Auburn	118
Memphis	148	East Saginaw	83
Philadelphia	56	Sandusky	81
Savannah	78	Lockport	59
Peoria	68	Cambridge	44

The water in the pond, Dec. 1, 1881, was two feet five and seven eighths inches above the top of the conduit. On Dec. 1, 1882, it stood one foot eight and one half inches above the top of the conduit, showing a loss of about one foot this year, compared with last year.

The water in the pond reached its highest point March 28, being then six feet ten and one half inches above the conduit. This was about two inches lower than the highest point reached in 1881.

We give our usual statement showing the comparative rainfall and height of water in the pond during the year, compared with the two preceding years.

Months.	Rainfall.			Below High-water Mark.		
	1880.	1881.	1882.	1880.	1881.	1882.
	Inches.	Inches.	Inches.	Feet.	Feet.	Feet.
December, 1881	3.76	1.98	3.30	4.87	8.52	5.48
January, 1882	2.62	5.03	4.73	4.87	8.55	5.48
February, "	3.49	4.14	4.48	4.60	8.20	4.27
March, "	2.85	6.07	2.49	4.14	2.65	1.32
April, "	1.94	1.83	2.27	3.90	0.98	1.24
May, "	1.44	3.62	4.93	4.44	1.26	1.64
June, "	0.73	6.27	2.73	5.38	1.72	2.08
July, "	6.49	3.41	2.08	6.29	2.36	3.04
August, "	3.48	1.13	1.41	6.79	3.24	4.32
September, "	1.63	2.74	7.80	7.46	4.07	5.09
October, "	2.63	2.85	2.19	8.03	4.87	5.32
November, "	2.25	4.68	1.21	8.33	5.23	5.90
Total for the year	33.31	42.85	39.62	Av. 5.76	Av. 4.30	Av. 3.77

Purity of the Water.

The analyses made during the year have not shown any material change in the water, and no complaints have come to us in regard to the quality of the water except those of a local nature, which are soon removed.

There is one source of impurity which affects our water every year, and which the analysis plainly shows. On the southwesterly side of the pond there is a piece of swamp land comprising some acres. This land is overflowed when the pond is partly full, but nearly bare at very low water; it is covered with a heavy growth of vegetable matter every year. In the fall of the year the leaves and grass fall into the water and are floated over in large quantities against our conduit and the eastern shore, in a decaying condition. At a very moderate expense an embankment might be made which would effectually prevent any of this matter that was in suspense in the water from floating into and across the pond, and only such of it would come into

the pond from this source as might be in solution after it had filtered through the embankment to be thrown up as suggested. In this way this trouble might be easily removed. The water is low in the pond now, the material is near that will be required to do the job, and it might be done to advantage this winter, giving work to some of our citizens who will very much need it.

Leakage and Waste.

Our system of thorough inspection of the fixtures on the premises of the water-takers, in connection with sectional night examinations of the street pipes, has been continued, with most satisfactory results. During the year 152 leaks have been found and stopped, 31 on main pipes, 56 on supply pipes, and 65 on the premises of the water-takers. The good results of this work and the sound condition of the pipes in regard to leakage are demonstrated by the registering of the chronograph at the reservoir in the night between 12 and 4 A. M., a recent record showing the fall in the reservoir during these hours to be only $3\frac{59}{100}$ inches, which is equal to 28,668 gallons per hour, as against 34,293 gallons per hour last year. This amount of water necessarily represents all the night consumption, leakage, and waste. When we remember that the railroads, some of our manufactories, and other industries use water during the night always, that we have about 90 miles of main pipes in the streets, from which are taken 7,724 supplies, and that connected with these supplies there are more than 28,600 openings, we think it will be seen that in respect to leakage and waste we are very near, if we have not already reached, the practicable minimum. This favorable condition we believe to be largely due to the constant care and attention of our superintendent, who, with the board, believes in this system of saving water.

High Service.

The high-service system adopted last year by this board for those who lived on the highest lands in our city, who are above our reservoir, and at best could get only a partial supply by means of storage tanks in their houses, has been completed in accordance with plans which we set forth in detail in our last

annual report. The work was commenced early in the spring and was put in operation June 10th last, and has since that time been in perfect working order, accomplishing all that was expected, and giving entire satisfaction to all those who are benefited by it. Without in any way interfering with our present system, it completely meets all the needs of the high places in Cambridge. Not only has it removed the just cause of complaint from those who so long suffered for want of an adequate supply of water, but it has also shown us how, in the future, when, by the increased consumption of the city, the head is drawn down so as to affect other high lands and places in Cambridge, and the supply becomes irregular and insufficient, we can then extend this system to these sections and supply them. By so doing we shall put off the necessity of purchasing another large pump for several years, by deferring the time when it will be necessary to run two large pumps to supply the wants of the city. In this view alone we believe this to have been a wise and economical expenditure.

Additional Water Supply.

Our efforts last winter to get the right to take the water of Shawsheen River for an additional supply were not successful. There was a strong opposition from Andover and the city of Boston. In regard to Andover and her mill rights, we think it was conclusively shown that it would be a positive advantage to her water power on the river to grant Cambridge all she asked for, as a large reservoir for the storage of water would be built, of which the water power of the river could have the use and advantage in dry times, when Cambridge would not need it, as Cambridge, having so large a place as Fresh Pond to store water in for her use, could always draw from the Shawsheen to fill Fresh Pond when the river was running more than its average volume of water. It was also argued that Boston already had an ample, and, if properly used, abundant supply for her own use and also to supply Cambridge any that she might want in the future, and therefore Cambridge should first apply to Boston before asking for Shawsheen. We failed to see the force of this position when Boston was asking for this same source of supply to re-enforce her Mystic works,

but, that this might not stand in our way in any further efforts to get a supply, an application was made to the city of Boston by a committee appointed by the City Council to learn if the city of Boston could and would supply the future wants of Cambridge for water, and upon what terms.

We do not learn that anything has been accomplished in this direction, nor yet do we see how Boston can, with her own large and rapidly increasing population, supply to Cambridge water for her future wants. Boston has been for the past two years asking the Legislature for the right to take water from the Shawsheen River to re-enforce her Mystic works. During the present year the Boston Water Board sounded the alarm on account of her water supply running low, the use of hose was suspended and other steps taken to reduce the consumption as much as possible.

There would be a serious objection to Cambridge getting a water supply from Boston if she could furnish it, if it was to come from the Cochituate system, on account of the quality of the water. Judging from the experience of the last few years, we do not not think that the Cochituate water would be acceptable to the people of Cambridge.

We do not know of any other source of water supply for Cambridge within a reasonable distance and that can be got at a moderate cost. We cannot blame Boston for wishing to get an additional supply of good, soft, pure water from the Shawsheen for her Mystic works. Seeing no other feasible way to get a supply, we therefore recommend that every proper effort be made either by Cambridge alone, or in connection with Boston, as may be deemed best, until we secure from the Legislature the right to take water from Shawsheen River as an additional water supply.

General Remarks.

A considerable amount of work has been done this year in relaying pipes in the filled district; the old pipes had become buried so deep that it was difficult and expensive to make repairs; many of the pipes were decayed and leaky, and were so deep that it would cost more than they were worth to dig them up. Therefore most of this district had to be newly

piped and furnished with new supplies. For details of the work done during the year and many other items of interest, we would refer you to the reports of the superintendent and registrar made to this board, and herewith submitted as part of our report to you.

All departments of the water works are in good order and well manned; all necessary work is well and promptly done.

The growth of our works is shown in the fact that during the year two hundred and one new supplies have been put in. There are but few vacant houses, or places where the water is shut off or sealed.

We would suggest that something more should be done, by setting out shrubbery and otherwise, to improve and beautify Tudor Park, so that no question may properly be raised in regard to the city's complying with the conditions upon which the land was given to the city for the purpose of a park.

We do not anticipate any large expenditure on construction account the ensuing year. There will always be some things that will have to be done, such as repairs on the reservoir, which should be made next year, the improvement of the borders of the pond as herein elsewhere suggested, to preserve and improve the quality of our water, and other things of a similar nature which come in as the usual routine of care and repair.

All that seems to be now needed to complete our water works and put them in such condition as that they would be second to none, is a reliable additional supply of pure, soft water, and until this is procured we shall be constantly liable to a season of short supply and threatened with water famine. Our city presents unusual inducements to manufacturing interests to locate in our borders, along our water front, and with the large increase of population which is coming, and must continue to come to us, sound judgment plainly indicates that we must have a larger and more reliable supply of water.

GEORGE P. CARTER,
C. W. KINGSLEY,
JAS. M. W. HALL,
H. L. EUSTIS,
K. S. CHAFFEE,
JAMES A. FOX,
GEO. H. HOWARD,
} *Water Board.*

REPORT

OF THE

WATER REGISTRAR.

WATER REGISTRAR'S OFFICE,
CAMBRIDGE, Dec. 9, 1882.

To the Cambridge Water Board: —

THE undersigned herewith presents his seventh annual report, showing the receipts, expenditures, and abatements for the year ending Nov. 30, 1882, together with a statement of the number of water-takers, fixtures, etc., as required by city ordinance.

Amount of bills remaining unpaid Nov. 30, 1881: —

Water rates	$423 17	
Meter rates	95 64	
Supplies and repairs	580 12	
		$1,098 93

Amount of bills placed in hands of City Treasurer for collection from Dec. 1, 1881, to Dec. 1, 1882: —

Water rates	$146,864 66	
Meter rates	35,013 55	
Supplies and repairs	4,264 07	
Off and on water, seals, fines, and rent	754 35	
		186,896 63
Total		$187,995 56

Deduct.	Abated.	Unpaid.	
Water rates	$3,398 49	$109 15	
Meter rates	121 38	38 18	
Supplies and repairs	9 42	1,002 26	
	$3,529 29	$1,149 59	4,678 88
Balance			$183,316 68
Amount reported by City Treasurer as received by him			$183,316 68

Receipts.

Water rates	$143,780 19	
Meter rates	34,949 63	
		$178,729 82
Off and on water, seals, and fines	$610 35	
Rent of house at pipe yard	144 00	
		754 35
Total rates, fines, etc.		$179,484 17
Supplies and repairs		3,832 51
Total		$183,316 68

Expenditures.

Construction account, 13 months		$16,959 12
Supply account, 13 months		3,684 63
Maintenance account, 13 months, viz.: —		
Care and repairs	$13,684 84	
Pumping service	9,441 50	
Office expenses	5,743 72	
		28,870 06
Total		$49,513 81

Abatements.

Abatements of water rates have been made during the year to the amount of	$3,519 87
Abatements on supply and repair account	9 42
Total	$3,529 29

The above amount of abatements is mostly caused by the necessary abatement of all charges for water rates upon supplies shut off or fixtures sealed before the books can be balanced. New charges are then made when the water is again let on.

Refunds.

Water rates have been refunded to the amount of	$1,299 02
Which amount deducted from receipts	178,729 82
Leaves net receipts for water	$177,430 80
Add off and on, seals, fines, and rent	754 35
Makes net receipts of rates, fines, etc.	$178,185 15

Unpaid.

Water rates unpaid, Nov. 30, 1882	$109 15
Meter rates unpaid, Nov. 30, 1882	38 18
Supplies and repairs unpaid, Nov. 30, 1882	1,002 26
Total	$1,149 59

Off and On.

Water has been shut off for non-payment of rates, or per order, on account of vacancy, and seals have been applied to fixtures by request of owners or occupants, as follows: —

Supplies shut off in 1882	387
Supplies let on, shut off in 1882	304
Supplies let on, shut off in previous years	73
New supplies let on	186
Seal locks applied to fixtures in 1882	467
Seal locks removed, put on in 1882	174
Seal locks removed, put on in previous years	171

Statement of the yearly revenue received from water rates since the purchase of the works by the city.

From April 28, 1865, to Dec. 1, 1865	$32,367 19
" Dec. 1, 1865, " 1, 1866	40,073 27
" " 1, 1866, " 1, 1867	52,733 62
" " 1, 1867, " 1, 1868	63,747 42
" " 1, 1868, " 1, 1869	76,149 30
" " 1, 1869, " 1, 1870	92,606 95
" " 1, 1870, " 1, 1871	111,782 65
" " 1, 1871, " 1, 1872	127,201 30
" " 1, 1872, " 1, 1873	146,117 32
" " 1, 1873, " 1, 1874	153,634 27
" " 1, 1874, " 1, 1875	138,880 37
" " 1, 1875, " 1, 1876	179,166 76
" " 1, 1876, " 1, 1877	154,843 59
" " 1, 1877, " 1, 1878	157,443 91
" " 1, 1878, " 1, 1879	164,681 90
" " 1, 1879, " 1, 1880	173,325 49
" " 1, 1880, " 1, 1881	170,062 73
" " 1, 1881, " 1, 1882	177,430 80

Comparative Statement.

	1881.		1882.	
Construction Account.				
Received				
Expended	.....	$6,824 81	.....	$16,959 12
Supply Account.				
Received	.....	$3,710 78	.....	$3,832 51
Expended	.....	2,928 68	.....	3,684 63
Excess of Receipts	.....	$782 10	.....	$147 88
Maintenance Account.				
RECEIVED.				
Rates, Fines, etc	.....	$170,897 23	.....	$178,185 15
Collected for error on C. and R. bill	.....	.....	.....	5 92
				$178,191 07
EXPENDED.				
Care and Repairs	$23,833 89	.....	$28,870 06	
Interest on Water Debt	91,585 00	.....	88,585 00	
Paid to Sinking Fund Commissioners	45,855 00	161.273 89	44,355 00	161,810 06
Excess of Receipts	.....	$9,623 34	.....	$16,381 01
Supply Account, Excess of Receipts		$782 10	.....	$147 88
Maintenance Account, Excess of Receipts		9,623 34	.....	16,381 01
		$10,405 44	.....	$16,528 89
Deduct Expended on Construction Account		6,824 81		
Excess of Total Receipts over Total Expenses		$3,580 63		
Expended on Construction Account				$16,959 12
Deduct Surplus as above				16,528 89
Excess of Total Expenditures over Total Receipts				$430 23

Net surplus, Nov. 30, 1881	$3,580 63
Less deficiency, Nov. 30, 1882	430 23
Leaving balance due water works	$3,150 40

The above is the amount accrued since the report of unexpended balances to Nov. 30, 1880, which is now in the Auditor's hands for examination.

Besides the manufactories, etc., supplied by meter, water is now supplied to 11,249 families, 818 stables, with 2,159 horses and 257 cows, 241 shops, 309 stores and offices, by the following fixtures, viz. : —

13,817 faucets.	26 hopper closets.
3,746 wash-basins.	66 urinals.
2,224 wash-tubs.	66 yard hydrants.
2,003 bath-tubs.	5 fountains.
5,077 pan-closets.	3 tumbler washers.
794 slop-closets.	956 hand hose.

Also, —

582 fire hydrants (besides 4 on private premises).
14 fire reservoirs.
15 drinking fountains in public squares.

The above is exclusive of the school-houses, engine-houses, police stations, and other city buildings, for which special rates are charged, except where meters are located.

All premises supplied with Fresh Pond water have been visited during the year, and from this inspection, aided by reports from plumbers, a considerable amount of water rates has been added for fractional parts of the year.

Respectfully submitted,

J. WARREN COTTON,
Registrar.

REPORT

OF THE

COMMITTEE ON ACCOUNTS OF THE CAMBRIDGE WATER BOARD.

We have examined the abstract of accounts as presented by the Water Registrar, covering the records of the past year. We have compared these with the statements submitted to us by the City Treasurer and Auditor, and we find them to agree. Annexed, in brief, is the financial statement presented to us by the Water Registrar, and verified by us.

Amount of bills in City Treasurer's hands uncollected Nov. 30, 1881: —		
For water rates	$423 71	
" meter rates	95 64	
" supplies and repairs	580 12	
		$1,098 93
Amount of bills deposited with City Treasurer for collection during the year ending Nov. 30, 1882: —		
For water rates	$146,864 66	
" meter rates	35,013 55	
" supplies and repairs	4,264 07	
" turning off and on, seals and fines,	610 35	
" rent of house at pipe yard . . .	144 00	
		186,896 63
Of these amounts the Treasurer has collected	$183,316 68	
Less refunded	1,299 02	
	$182,017 66	
Refunded as above	1,299 02	
Abated	3,529 29	
Balance uncollected, Nov. 30, 1882	1,149 59	
	$187,995 56	$187,995 56

JAMES M. W. HALL,
JAMES A. FOX,
GEO. H. HOWARD,
} *Committee on Accounts.*

November 30, 1882.

REPORT

OF THE

SUPERINTENDENT OF THE WATER WORKS.

To the President and Members of the Cambridge Water Board:—

Gentlemen, — The annual report of your superintendent upon the condition of the works and the operations of the past year is herein presented.

The total amount of water pumped is 903,234,909 gallons.

Coal consumed per million gallons pumped, 1,670.93 pounds.

Water sold by meter, and that used for watering streets, 233,497,905 gallons, leaving as the amount for domestic use 669,737,004 gallons.

Number of gallons daily for each inhabitant on the whole amount pumped, $44\frac{1}{5}$ gallons.

Number of gallons daily for each inhabitant on amount for domestic use, $32\frac{3}{4}$ gallons.

Spy and Little Ponds, Wellington Brook, and Conduit.

From analysis of the water of Spy Pond there does not appear to be any improvement in its condition. No water has been drawn from it during the year. The gate-house and gate are in good condition.

Slight repairs have been made on the foundations of the gate-house at Little Pond where the ice had loosened the stones. The gate was opened, letting water through the conduit to Fresh Pond, Feb. 27th (the Little Pond gauge at 15.25), and kept open until March 1st, when it was again closed.

The filter basin appears to be in good repair.

There is no apparent change in the condition of Wellington Brook and its branches since my last report. The gates were

opened Jan. 26th, supplying Fresh Pond from this source until April 5th, when they were again closed. On March 2d the amount of drainage from Niles Brothers' muck heaps was large. From this cause of pollution we are continually threatened, and, doubtless, we shall again have trouble whenever there is a thaw.

Owing to the height of water no interior inspection has been made of the conduit, which appears to be in good condition.

Fresh Pond.

The banks at and around the gate-house and conduit at Black's Nook have settled to such an extent that repairs must be made in the spring.

The engine-house and gate-house on the border of the pond, at the end of the brick conduit, have been painted, and the stone slope of the pump-room has been taken up and relaid in cement, as the stones had become loosened by muskrats and action of the water.

The water of the pond has been of its usual excellent quality during the year.

The pond reached its highest point, 15.87, March 28th, and lowest, 10.69, Nov. 30th.

Engine-House.

Slight repairs have been made on the roof balustrade, and the building has been thoroughly painted. A new 4-inch iron blow-off pipe has been laid from the boilers to the sewer in Fresh Pond drive. The old cement one had become useless and was tumbling to pieces.

A new tell-tale pipe has been laid in the trench dug for the high-service force main, connecting with the larger reservoir, and attached to the mercury gauge. The old one gave trouble from freezing during the winter.

The grounds about the engine-house and of Tudor Park have received the necessary care, and the fences have been repaired. I recommend that a good substantial fence of wood or iron be put around Tudor Park and the engine-house lot, as the one now in place affords little protection to the grounds and trees.

Reservoir.

No repairs have been made during the year. The high retaining wall, near the northwest corner, on Reservoir Street, shows a slight movement since last year, but was deemed safe by your committee until the coming spring. There is no indication of leakage other than has been heretofore reported. The gates are in good condition. The grass has been cut and walks graded from time to time.

The tank for the chronograph float has been reset and the chronograph is in working order, but experience has shown the stand-pipe house to be an unsuitable place for it. The constant dampness of the stand-pipe causes the paper to cockle, at times giving imperfect records, especially in wet weather. There should be a dry and warmer room for this instrument. Its action is of great value, constantly recording the fluctuations of the water level in the reservoir, and of particular importance are the diagrams of night consumption, which are the only true records of the condition of the works in regard to waste and leakage. I recommend a small, neat house to be built, about twelve feet north of the stand-pipe, specially for the chronograph, and then desirable improvements could be made in the tank, whereby more perfect records would be obtained.

High Service.

The high-service system has been completed in accordance with plans adopted by your Honorable Board last year. Contracts were made with the Warren Foundry to furnish pipes and special castings, with H. R. Worthington to furnish engine and pump, and with the Coffin Valve Company to furnish gates and check-valves, all to be delivered on or before April 1st, 1882. A portion of the pipes being on hand, the work was commenced March 13th, and finished June 10th, and at 10.30 of that day the gates were opened and the pump started. Since this time it has run uninterruptedly, accomplishing all the expected results and with a large reserve of capacity for the future growth of the high territory.

There were laid for this service the following lengths of pipe: 2,060 feet of 10-inch and 12-inch (for force main), 24 feet of

4-inch at engine-house (charging pipe), 17 feet of 4-inch at Lake View Avenue (for blow-off), 80 feet of 4-inch in Huron Street, 225 feet of 4-inch in Fayerweather Street, 303 feet of 2-inch and 142 feet of 1½-inch in Reservoir Street, 70 feet of 1¼-inch and 2,060 feet of ¾-inch for tell-tale, 278 feet of 4-inch in Mt. Vernon Street, 352 feet of 6-inch in Lambert Avenue, 976 feet of 6-inch in Linnæan Street, 85 feet of 4-inch in Concord Avenue, north of Sparks Street, and 2,305 feet of 8-inch in Highland Street, Appleton Street, and Vassal Lane to Sparks Street, a total length of pipe of all sizes of 8,977 feet. There were used eleven 6-inch check-valves and one 10-inch, placed at various points on contour line 58 grade, separating the high and low service, and also one 12-inch gate, one 10-inch, two 8-inch, six 6-inch, and four 4-inch, making a total of 12 check-valves and 12 gates.

Main Pipe.

Aside from the high service, main pipe has been laid in the following streets: 108 feet of 4-inch in Elm Street, 241 feet of 4-inch in Henry Street, 160 feet of 6-inch in Prison Point Street, 77 feet of 4-inch in Somerset Street, 134 feet of 2-inch and 43 feet of 1½-inch in Stinson Court, 405 feet of 6-inch in Lancaster Street, 96 feet of 4 inch in Lancaster Court, 94 feet of 4-inch in Summer Street, 112 feet of 4-inch in Dunster Street, 36 feet of 6-inch in Beech Street, 24 feet of 6-inch in Binney Street, 120 feet of 8-inch in New Ninth Street, 134 feet of 1-inch in Lyman Street, 168 feet of 6-inch in Montgomery Street, 253 feet of 4-inch in Blanche Street, 110 feet of 1½-inch and 361 feet of 1¼-inch in Osborn and Albany Streets, 72 feet of 6-inch in Munroe Street, 224 feet of 6-inch in Western Avenue, 114 feet of 4-inch in Sixth Street, 131 feet of 6-inch in First Street, 157 feet of 6-inch in Martin Street, 150 feet of 4-inch in Parker Street.

In the territory known as the Cambridge Street district, including Willow, Harding, Jefferson, Porter, Bedford, and McCabe Streets, the old pipe has been abandoned, except where it was practicable to raise it (it was 337 feet in length), and 2,170 feet of 4-inch new pipe has been laid, with fifty new supplies from the mains, and sidewalk shut-offs put on. This

was a much-needed improvement, the mains and supplies being from six to nine feet deep, making it expensive repairing or shutting off.

In consequence of Ninth Street being changed in location between Binney and Potter Streets, the main pipe was taken up and relaid under an agreement made with the City Council by the American Rubber Company.

In Lambert Avenue 310 feet of pipe was lowered on account of a change in the street grade.

On Putnam Avenue about 100 feet of 16-inch pipe has been lowered where it crosses the old mill-pond canal, in consequence of filling at this point by the Street Department. The house and bridge supporting the pipe were removed, and the pipe bedded in gravel.

All the main pipes east of Harvard Square have been tested, by sections, at night, between the hours of twelve and five, during the months of September and October, with very satisfactory results. At the completion of this inspection the chronograph showed the least loss from the reservoir between the hours of 12 and 4 A. M. that we have had for several years, the total fall for the four hours being 3.59 inches, equivalent to 114,673 gallons' discharge, or 28,668 gallons per hour.

All of the gates have been inspected and their locations marked.

New Supplies.

Two hundred and one new supplies have been laid during the year, making the total at this date 7,724. Twenty old supplies have been renewed, besides the renewals in the Cambridge Street district, and fifty-two old supplies have been furnished with sidewalk shut-offs. All the supplies on Cambridge and Bridge Streets should have sidewalk shut-offs, as the amount of shutting off and letting on in this locality causes so much digging up of the streets.

Leakage.

One hundred and fifty-two leaks have been stopped; one on 2-inch main, two on 3-inch iron, twelve on 4-inch iron, two on 4-inch cement, four on 6-inch iron, two on 8-inch iron, four on 10-inch cement, one on 20-inch iron, one on 24-inch, and two

on 30-inch pumping mains, thirty-four on supplies in street, twenty-two on supplies within premises, and sixty-five repaired by owner or occupant after notice from the office. All of the fixtures throughout the city have been inspected during the year, and in some localities twice, notice being left on the premises wherever any imperfect fixtures or waste of water had been detected. The work has been quietly done, and the expense has been light.

Thirty-four hydrant and fifty-one gate boxes have been set in place of decayed ones removed.

Brookline Street Pipe Bridge.

Repairs have been made on the house covering the pipe where it was damaged by the ice during the winter.

Hydrants, etc.

Seventeen new post hydrants have been set during the year, all in new locations, and one post hydrant in place of flush hydrant removed, at Tower's factory, on Broadway.

Three flush hydrants have been removed viz. : Main Street at junction of Harvard, Broadway at Third, and Waverly at corner of Talbot.

The present number is 260 post and 336 flush hydrants.

One garden hydrant has been set, making the present number 111.

Thirteen meters have been set and thirteen removed, leaving the present number the same as last year, 157.

The drinking fountain at Fort Washington has been discontinued, and two have been removed,—Main Street at junction of Front; and west side of Third Street, north of Main; one has been added at junction of Main Street with Broadway: making the present number fifteen.

Two stand-pipes have been put in and one discontinued. The present number is 36.

Pipe Yard.

The sheds at the pipe yard have been repaired, and slight repairs made on the dwelling, painting and papering. All of the buildings are now in good repair.

Accompanying this report is that of the engineer at the pumping works, and tables showing the monthly amount and daily average of water pumped, the Fresh Pond record of water heights, the locations of fountains, stand-pipes, and meters, the details of main and supply extensions, and the amount of stock on hand.

Respectfully submitted,

HIRAM NEVONS,
Superintendent.

CAMBRIDGE, Dec. 2, 1882.

List of Meters in Use Nov. 30, 1882.

METERS.	Locality.	Size.	Description.
		Inch.	
Andrews, A. H.	Ninth St.	$\frac{3}{4}$	Désper.
American Rubber Co.	Potter St.	4	Crown.
American Net and Twine Co.	Third St.	$1\frac{1}{2}$	Worthington.
American Steam Safe Co.	Main St.	1	"
Badger & Daniels	Thorndike St.	$\frac{3}{4}$	Désper.
Barbour, W. O.	Main St.	$\frac{3}{4}$	Worthington.
Bird, H. M (Iron Foundry)	Broadway	$\frac{5}{8}$	Union Rotary.
Boston Woven Hose Co.	Broadway	$1\frac{1}{2}$	Worthington.
Boston Stamping Co. (Tinware Manufactory)	Third St.	2	"
Boston Chemical Works	Third St.	1	"
Boston & Lowell R. R. (Repair Shop)	Bridge St.	2	"
Boston & Lowell R. R. (Round House)	Prison Point St.	2	"
Boston & Lowell R. R. (New Round House)	Prison Point St.	2	"
Boston & Lowell R. R. (Paint Shop)	Prison Point St.	1	"
Boston & Lowell R. R. (Filling Locomotives)	Prison Point St.	6	Union Rotary.
Boston & Lowell R. R. (Car House)	Prison Point St.	2	Worthington.
Bullock, O. S. (Machine Shop)	Broadway	1	"
Carr Brothers (Soap Factory)	Lopez St.	1	"
Capen, Sprague & Co. (Oil Works)	Sixth St.	$\frac{3}{4}$	"
Cambridgeport Diary Co.	Magazine St.	1	"
Cambridge Gas Light Co.	Third St.	2	"
Campbell Bros. (Boiler Factory)	Osborn St.	$\frac{5}{8}$	"
City of Cambridge (Shepard School)	North Ave.	2	"
City of Cambridge (Ward 1 Building)	Brattle Sq.	2	"
City of Cambridge (Ward 4 Building)	Central Sq.	$1\frac{1}{2}$	"
City of Cambridge (Cemetery)	Coolidge Ave.	4	"
City of Cambridge (Almshouse)	Tannery St.	2	"
Close Geo. (Confectionery)	Broadway	1	"
Clark, B. P. & Co. (Confectionery)	Main St.	$1\frac{1}{2}$	"
Cochran, A. & Co. (Ammonia Factory)	Potter St.	$\frac{3}{4}$	"
Coleman, John & Sons (Coal Wharf)	Broadway	1	"
Coopers' Car Wheel Co.	Hampshire St.	$\frac{5}{8}$	Désper.
Cofran, S. M. (Brick Yard)	Concord Ave.	2	Worthington.
Coolidge, J. G. (Floral Conservatory)	Coolidge Ave.	1	"
Coolidge, J. G.	Coolidge Ave.	2	"
Davis, Curtis, & Co. (Soap Factory)	Broadway	$1\frac{1}{2}$	"
Davis, J. C. & Son (Soap Factory)	Broadway	1	"
Davis, Mason (Soap Factory)	Lincoln St.	$\frac{5}{8}$	"
Dailey, Chas. W. (Livery Stable)	Cambridge St.	1	"
Derby, H. (Vinegar Works)	Main St.	1	Crown.
Downing, Theo. (Tannery)	Eustis Ct.	1	Worthington.
Draper, F. & Co. (Brass Works)	Otis St.	$\frac{5}{8}$	Union Rotary.
De Rosay & Son (Brick Yard)	Dublin St.	$\frac{3}{4}$	Worthington.
East Cambridge Club Stable	First St.	1	"
Ela Brothers (Ivory Turning)	Broadway	1	"
Episcopal Theological Seminary (Dormitory)	Brattle St.	$1\frac{1}{2}$	"
Fenton, H. & Co. (Mattress Factory)	Gore St.	$\frac{3}{4}$	Désper.
French, C. A. (Hotel)	Farwell Pl.	1	Worthington.
Geldowsky, F. (Furniture Manufactory)	Otis St.	1	"
Gilmore & Eustis (Rolling Mill)	Portland St.	2	"
Goepper Bros. (Barrel Factory)	Ninth St.	2	"
Greely, Leander (Planing Mill)	Broadway	$1\frac{1}{2}$	"

List of Meters in Use Nov. 30, 1882. — *Continued.*

METERS.	Locality.	Size. Inch.	Description.
Griffin & Dolan (Soap Factory)	Decatur St.	3/4	Désper.
Harvard College (Boylston Hall)		2	Crown.
Harvard College (Holworthy Hall)		3/4	Worthington.
Harvard College (Stoughton Hall)		5/8	"
Harvard College (Sever Hall)		1	"
Harvard College (Thayer Hall)		1 1/2	"
Harvard College (In Yard)		1 1/2	"
Harvard College (Memorial Hall)	Cambridge St.	2	"
Harvard College (Boat-House)	Flagg St.	3/4	Ball & Fitts.
Harvard College (Botanical Garden)	Garden St.	1	Worthington.
Harvard College (Gymnasium)	Cambridge St.	1	"
Harvard College (Holyoke House)	Harvard St.	2	"
Harvard College (Museum Comp. Zoölogy)	Divinity Ave.	1	"
Harvard College (Scientific School)	Kirkland St.	5/8	Désper.
Harvard College (New Law School)	Holmes Pl.	3/4	Worthington.
Hazlett, W. H. & Co. (Planing Mill)	Otis St.	1 1/2	"
Hews, A. H. & Co. (Pottery)	Crescent Ave.	1	"
Hixon, Edward, Jr. (Furniture Factory)	Main St.	3/4	Ball & Fitts.
Holmes, F. M., Manuf. Co. (Furniture)	Cambridge St.	2	Worthington.
Houghton, H. O. & Co. (Publishers)	Blackstone St.	2	"
Hovey & Co., north side (Floral Conservatory)	Cambridge St.	1	"
Hovey & Co., south side (Floral Conservatory)	Cambridge St.	3/4	"
Ivers & Pond (Piano Factory)	Albany St.	1	Union Rotary.
Jaynes & Co (Barrel Factory)	Pacific St.	1	Worthington.
Jones, C. L. & Co. (Soap Factory)	Pearl St.	3/4	"
Kemp, L. & Son (Soap Factory)	Davis St.	1	Ball & Fitts.
Kennedy, F. A. (Cracker Factory)	Green St.	1 1/2	Worthington.
Kendall & Roberts (Iron Works)	Main St.	3/4	"
Low, J. W. (Tannery)	Reed St.	1 1/2	"
Loan, J. J. (Soap Factory)	Columbia St.	1 1/2	Union Rotary.
Little, Brown & Co. (Book Bindery)	Blackstone St.	5/8	Worthington.
Lincoln & Chamberlin (Slaughter House)	Distillhouse St.	3/4	"
Mason & Hamlin Organ Co.	Broadway	1	"
Middlesex Bleachery (Dye Works)	Sacramento St.	3/4	"
Middlesex County (House of Correction)	Thorndike St.	2	"
Middlesex County (Court House)	Thorndike St.	3/4	"
Middlesex County (Court House)	Otis St.	3/4	Ball & Fttts.
Middlesex County (Registry of Deeds)	Otis St.	3/4	Worthington.
Millan, Alex. (Fish Market)	Brattle St.	1/2	Désper.
Moering, Mrs. A. L. (Beck Hall)	Main St.	1	Worthington.
Mt. Auburn Corporation (Floral Conservatory)	Brattle St.	1	"
Mt. Auburn Corporation (Cemetery)	Mt. Auburn St.	3/4	Désper.
Murdock, W. H. (Floral Conservatory)	Grigg St.	5/8	"
New England Glass Co.	North St.	2	Worthington.
Norton, E. H. (Soap Factory)	Winsor St.	3/4	Désper.
Page, Geo. G. & Co. (Box Factory)	Hampshire St.	2	Worthington.
Parry, Bros. & Co. (Brick Yard	Raymond St.	5/8	"
Pike, James & Co. (Livery Stable)	Church St.	1	"
Pike, Joel S. (Livery Stable)	Palmer St.	1	"
Porcellian Club (Harvard Students)	Harvard St.	3/4	Union Rotary.
Porter's Hotel (Frank Locke)	North Ave.	3/4	Worthington.
Prospect House (Joseph Uhrig)	Main St.	1 1/2	"
Ross House (Mrs. H. P. Ross)	Broadway	5/8	"
Reardon, John & Sons (Oleomargarine Factory)	Talbot St.	4	"
Reardon, William (Soap Factory)	Portland St	5/8	Désper.
Revere Sugar Refinery (south side)	Water St.	3	Worthington.
Revere Sugar Refinery (north side)	Water St.	3	Union Rotary.
Reversible Collar Co.	Mt. Auburn St.	1	Worthington.
Rhoades, Silas, & Son (Planing Mill)	State St.	2	"
Rideout, M. E. & D. T. (Planing Mill)	Banks St.	3/4	"
Roberts, O. P.	Brattle St.	1	"
Robinson, J. P. & Co.	Main St.	1	Crown.
Rogers, Geo. M.	Washington St.	3	Worthington.
Russ Moulding Co.	Thorndike St.	3/4	Crown.
Sands, John L., Estate (Brick Yard)	Walden St.	3/4	Worthington.
Sanborn, G. P. & Son (Pickling Factory)	Gore St.	3/4	Désper.
Shorey Geo. L. (Laundry)	Soden St.	1 1/2	Worthington.
Shaw & Applin (Furniture Manufactory)	Bridge St.	1 1/2	"
Smart, D. C. (Wood Turning)	Main St.	5/8	Désper.
Sortwell & Co. (Distillery)	Distillhouse St.	2	Worthington.
Squire, John P. & Co. (Slaughter House)	Gore St.	4	"
Squire, John P. & Co. (Slaughter House)	Gore St.	2	"
Squire, John P. & Co. (Stable)	Gore St.	1	"

List of Meters in Use Nov. 30, 1882. — *Concluded.*

METERS.	Locality.	Size.	Description.
		Inch.	
St. Mary's Church	Norfolk St.	2	Worthington.
Stiles, John C. (Omnibus Stable)	Cambridge St.	2	"
Stiles, John C. (Watering Horses)	Inman Sq.	$\frac{5}{8}$	Désper.
Tower, Sylvester (Piano Key Factory)	Broadway	1	Worthington.
Tug "Henry Chapel" (Steamboat)	First St.	2	Crown.
Thayer, Henry & Co. (Laboratory)	Broadway	2	Worthington.
Tribune Publishing Co.	Linden St.	$\frac{5}{8}$	Désper.
Tracey, M. F.	Brighton St.	1	"
Union Railway Co (Washing Cars)	Dunster St.	$\frac{3}{4}$	Worthington.
Union Railway Co. (Repair Shop)	Dunster St.	$\frac{3}{4}$	"
Union Railway Co. (Car House)	Dunster St.	$\frac{5}{8}$	"
Union Railway Co. (Wooden Stable)	Dunster St.	$\frac{3}{4}$	"
Union Railway Co. (Brick Stable)	Dunster St.	$1\frac{1}{2}$	"
Union Railway Co. (North Side)	Cambridge St.	1	"
Union Railway Co. (South Side)	Cambridge St.	1	"
Union Railway Co. (Car House)	Baldwin St.	1	"
Union Railway Co. (Stable)	Mt. Auburn St.	1	"
Union Railway Co. (Stable)	Main St.	1	"
Union Railway Co. (Stable)	North Ave.	2	"
Union Railway Co. (Car House)	Cambridge, cor. Baldwin St.	1	Désper.
Union Railway Co. (Stable)	River St.	1	Worthington.
Union Railway Co. (Stable)	Murray St.	$1\frac{1}{2}$	"
Union Railway Co. (Washing Cars)	Murray St.	$1\frac{1}{2}$	Crown.
Union Glass Co. (Packing Room)	Webster Ave.	$\frac{3}{4}$	Désper.
Union Glass Co. (Pot Room)	Webster Ave.	1	Worthington.
Warren, J. H. (Felton Hall)	Cambridge St.	$1\frac{1}{2}$	"
Wellington, J. A. & Co. (Coal Wharf)	Fifth St.	$\frac{5}{8}$	"
Wilson, John, & Son (Publishers)	Brattle Sq.	1	"
Woodbridge, S. F. (East Slaughter House)	Frank St.	1	"
Woodbridge, S. F. (West Slaughter House)	Frank St.	$\frac{5}{8}$	"
Woods, Geo. & Co. (Organ Factory)	Main St.	2	"
Wight & Seorgie (Marble Polishing)	Mt. Auburn	$\frac{3}{4}$	Désper.

List of Drinking Fountains, Nov. 30, 1882.

Bridge Street, junction of Cambridge Street.
Broadway, southwest corner of Norfolk Street.
Brattle Square, east side of Brewer's Block.
Brattle Street, junction of Fresh Pond Lane.
Cambridge Street, south corner of Fifth Street.
Central Square, west side.
Central Square, east side.
Hampshire Street, junction of Broadway.
Harvard Square, at the flag-staff.
Inman Square, east side.
Main Street, junction of Broadway.
Main Street, junction of Mt. Auburn Street.
North Avenue, southwest corner of Walden Street.
North Avenue, north side, west of Cameron Street.
Putnam Avenue, southwest corner of Pearl Street.

List of Stand-Pipes (for Street Watering), Nov. 30, 1882.

Brattle Street, near University Press.
Brattle Street, corner of Sparks Street.
Brattle Street, near Fayerweather Street.
Brattle Street, near Fresh Pond Lane.
Bridge Street, junction of Cambridge Street.
Broadway, near Third Street.
Broadway, corner of Sixth Street.
Broadway, corner of Winsor Street.
Broadway, junction of Hampshire Street.
Brookline Street, corner of Putnam Avenue.
Cambridge Street, near Warren Street.
Cambridge Street, near Winsor Street.
Cambridge Street, at Inman Square.
Columbia Street, near Austin Street.
Concord Avenue, at junction of Garden Street.
Dana Street, at corner of Chatham Street.
Gore Street, west of Third Street.
Green Street, near Western Avenue.
Harvard Street, corner of Prescott Street.
Inman Street, near Broadway.
Kirkland Street, near Quincy Street.
Main Street, near Portland Street.
Main Street, near Hancock Street.
Magazine Street, opposite Warland Street.
Mt. Auburn Street, near Athens Street.
North Avenue, near Common.
North Avenue, corner of Sacramento Street.
North Avenue, near Roseland Street.
North Avenne, near Beech Street.
North Avenue, near Spruce Street.
North Avenue, corner of Norris Street.
North Avenue, opposite Tannery Street.
Prison Point Street, opposite Round House.
River Street, near Putnam Avenue.
Sixth Street, near Thorndike Street.
Third Street, near Rogers Street.
Thorndike Street, near Third Street.
Western Avenue, near Howard Street.

New Main Pipe, laid for Extensions and Renewals, from Dec. 1, 1881, to Nov. 30, 1882, inclusive, with the Number of Gates and Fire Hydrants used.

LOCATION.	Iron Pipe.		Gates.		Fire Hydrants.	
	Size.	Length.	No.	Size.	No.	Size.
	Inch.	Feet.		Inch.		Inch.
At Engine House	4	24				
High-Service Pumping Main	12	.....	1	12		
	10	2,060	1	10		
Lake View Avenue	4	17	1	4		
Huron Street	4	80	1	4		
Fayerweather Street	4	225				
Reservoir Street	2	303	1	8		
	1½	142	1	6		
Tell-tale	1¼	70				
	¾	2,060				
Mt. Vernon Street	4	278	1	4		
Lambert Avenue	6	352	1	6		
Linnæan Street	6	976	3	6		
Concord Avenue	4	85	1	4		
Vassal Lane, Appleton and Highland	8	2,305	1	8		
Elm Street	4	108				
Henry Street	4	241				
Prison Point Street	6	160				
Somerset Street	4	77				
Stinson Court	2	134				
	1½	43				
Lancaster Street	6	405	1	6	1	6
Lancaster Court	4	96				
Summer Street	4	94				
Dunster Street	4	112	1	4		
Beech Street	6	36				
Binney Street	6	24	1	6	1	6
New Ninth Street	8	120	....	....	1	6
Lyman Street	1	134				
Montgomery Street	6	168	1	6		
Blanche Street	4	253				
Osborn and Albany Streets	1½	110				
	1¼	361				
Munroe Street	6	72				
Western Avenue	6	224	1	4		
Sixth Street	4	114	1	4		
First Street	6	131				
Martin Street	6	157	1	6		
Parker Street	4	150	1	4		
Cambridge Street District	4	2,170	....	....	3	6
North Avenue	....	.....	....	....	2	6
Wendell Street	....	.....	....	....	1	6
Third Street	....	.....	....	....	3	6
Dana Street	....	.....	....	....	1	6
Main Street	....	.....	....	....	1	6
Waverly Street	....	.....	....	....	2	6
Murray Street	....	.....	....	....	1	6
Broadway	....	.....	....	....	1	6
Auburn and Pearl Streets	....	.....	1	4		

List of Check-Valves.

Location.	Size.
	Inch.
Lake View Avenue, 150 feet north from Huron Street	10
Lake View Avenue, 150 feet north from Brattle Street	6
Fayerweather and Reservoir Streets	6
Sparks Street, opposite Dr. Wyman's stable	6
Concord Avenue, 135 feet south from Buckingham	6
Buckingham Street, 220 feet west from Concord Avenue	6
Garden and Linnæan Streets	6
Raymond and Linnæan Streets	6
Avon Hill and Linnæan Streets	6
Arlington Street, 230 feet west from North Avenue	6
Mt. Vernon Street, 100 feet west from North Avenue	6
Mt. Pleasant Street, 150 feet south from Walden Street	6

Recapitulation.

	12 in.	10 in.	8 in.	6 in.	4 in.	2 in.	1½ in.	1¼ in.	1 in.	¾ in.	Totals.
Length of iron pipe	276	1,784	2,425	2,705	4,124	437	295	431	134	2,060	14,671
Number of gates	1	1	2	9	9						22
Number of hydrants	...	....	....	18							18
Number of check-valves,	...	1	....	11							12

New Supplies.

Galvanized Pipe and Brass Fittings, used from Dec. 1, 1881, to Nov. 30, 1882, inclusive.

		6 in.	4 in.	2 in.	1½ in.	1¼ in	1 in.	¾ in.	Totals.
Length galvanized pipe	....	44	594	438	....	126	528	6,711	8,441
Number of supplies	....	1	2	7	....	1	8	182	201
Number of stop and wastes	....	....	....	6	....	2	7	187	202
Number of screw cocks	....	....	....	4	....	2	7	158	171
Number of sidewalk cocks	....	....	....	....	....	....	6	181	187
Number of sidewalk standpipes	187	....	....	....	....	....	....	.....	187
Number of boxes, frames and covers	12	....	....	....	....	....	....	.....	12
Number of gates	....	1	2	....	....	....	....	.....	3

Statement of Stock on Hand, Dec. 1, 1882.

For Street Mains (Iron Pipe and Fittings).

Number of	48 in.	30 in.	24 in.	20 in.	16 in.	12 in.	10 in.	8 in.	6 in.	4 in.	3 in.
Straight pipes (12 ft. ea.)	2	25	....	17	16	11	16	14	85	111	...
Elbows	...	...	....	....	2	....	.....	....	....	....	...
Bends (1-36″)	...	...	2	2	....	2	9	1	7	2	...
Y branches	...	...	1	....	....	1	.....	....	....	....	...
Sleeves	...	2	3	8	4	8	8	2	11	4	7
Clamp sleeves	...	...	4	5	1	4	7	3	5	4	9
Drain offsets	...	...	....	....	....	....	.....	....	17	....	...
Offsets	...	...	....	....	....	....	6	....	6	4	...
Gates	...	...	....	....	....	2	2	....	1	....	1
Check-valves	...	...	2	....	....	....	.....	....	1	....	...
Blow-off branches	...	...	....	2-6″	....	....	.....	....	....	....	...
Caps	...	...	2	....	2	7	6	3	5	5	1
Crosses	...	...	....	1-20″	1-12″	5-10″	2-10″	1-8″	5-6″	13-4″	1-3″
	...	...	....	2-10″	3-6″	6-6″	2-8″	....	10-4″	....	...
	...	...	....	....	....	1-4″	7-6″	....	....	....	...
	...	...	....	....	....	4-3″	.....	....	....	....	...
Reducers	...	...	1-10″	2-12″	1-6″	2-10″	8-8″	6-6″	11-4″	1-3″	...
	...	...	1-8″	1-8″	....	1-6″	3-6″	....	....	....	...
T's	...	...	1-24″	3-20″	1-6″	8-10″	10-10″	2-8″	11-6″	9-4″	...
	...	...	1-8″	2-12″	....	6-6″	4-8″	13-6″	11-4″	....	...
	...	...	3-6″	2-6″	....	5-4·	19-6″	2-4″	....	....	...

For Supplies (Galvanized Pipe and Brass Fittings).

	2½ in.	2 in.	1½ in.	1¼ in.	1 in.	¾ in.	½ in.
Feet in length of galvanized pipe,	....	130	10	75	450	450	
Elbows	....	16	26	18	41	43	
Street elbows	....	.....	.....	.....	16	95	
Couplings	2	73	29	23	143	95	44
Unions for lead pipe	....	.....	.....	.....	.....	14	
Unions	....	20	28	20	33	65	7
Stop and wastes	....	2	1	1	14	56	
Screw cocks	....	4	1	1	30	79	
Sidewalk cocks	....	.....	.....	.....	.....	110	
Screw cocks for cement pipes	....	.....	.....	.....	14	12	
Blow-off cocks	....	.....	3	.....	.....	.....	
Hose bibbs	....	.....	.....	.....	12	4	9
Air chambers	....	.....	.....	.....	48	13	43
Socket ends of rods	....	.....	.....	.....	.....	94	
Nipples	2	22	40	75	.....	50	
Plugs	....	.....	23	22	34	121	
Bushings, 166 2-in. to ½ in.	....	.....	.....	.....	.....	.....	
Fountain cocks	....	.....	.....	.....	.....	2	
Hydrant cocks	....	.....	.....	.....	.....	7	
Sill cocks	....	.....	.....	.....	.....	9	
Hose nipples	....	.....	.....	.....	.....	29	
Corp cocks	....	.....	.....	3	36	.....	
Soldering nipples	....	.....	.....	.....	.....	15	
T's, malleable iron	....	.....	.....	23	43	203	41
T's, cast iron	....	280	120	100	100	400	
Crosses	....	70	110	90	80	30	
Reducing couplings	....	.....	.....	.....	.....	20	
Caps	....	.....	.....	.....	21	.....	
Stand-pipes, 38.							

Stock in Shop and at Yard.

1 lathe, with the usual chucks and tools.
1 water meter.
1 threading machine, with dies complete.
1 drilling machine.
2 tapping machines for supplies.
2 two-inch taps and drill.
1 breast drill.
2 hooks.
1 ratchet for tapping pipe.
1 machine, complete, for tapping cement pipe.
1 gig saw.
1 washer cutter.
1 platform scale.
2 grindstones.
1 large hand pump.
8 thawing pumps.
150 feet of thawing-out pipe.
1 hay cutter.
1 large boom derrick.
3 small derricks.
1 breast derrick.
9 pipe wrenches.
3 monkey wrenches.
7 pipe cutters.
7 pairs tongs.
2 sets main pipe tools.
3 blow-off wrenches.
3 two-inch cock wrenches.
2 one-inch cock wrenches.
3 hydrant wrenches.
14 gate wrenches.
7 oil cans.
8 die plates, with dies complete, from $\frac{1}{2}$ inch to 2 inch.
8 keys to garden hydrants.
4 tool chests.
2 hand carts.
4 chains.
43 shovels.
24 picks.
9 trench rammers.
2 paving rammers, with paving tools.
8 pails.
4 bars.
3 wheelbarrows.
4 tamping bars.
22 lanterns.
400 pounds lead.
90 pounds packing.
4 hydrant bodies.
26 flush hydrants.
7 three-inch nozzles.
19 two-inch nozzles.
6 flush hydrant frames.
40 flush hydrant covers.
2 garden hydrants.
2 post hydrants.
12 post hydrant rods.
5 hydrant valves.
9 bolts for flush hydrants.
3 stop and wastes for flush hydrants.
3 lead kettles and furnaces.
2 screws for raising main pipe.
3 bench vises.
3 drinking fountains.

8 different sizes bends for capping main pipe.
3 hydrant boxes.
6 small gate boxes.
13 large gate boxes.
3 two-inch cock boxes.
2 large frames and covers.
70 risers for gate and hydrant boxes.
180 seals.
4 gross nuts.
1 axe.
2 sledge hammers.
16 gallons oil.
1 pair rubber boots.
½ cord wood.
50 feet three-fourths inch hose.
2 casks cement.
5 screw drivers.
5 files.
1 square.
2 saws.
1 plane, compasses, etc., for carpentering.
5 three-fourths inch Worthington meters.
1 one and one-half inch Worthington meter.
1 two-inch Worthington meter.
1 three-fourths inch Crown meter.
1 five-eighths inch Désper meter.
2 three-fourths inch Désper meter.
1 three-fourths inch Ball & Fitts meter.
1 one and one-half inch Boston meter.
A lot of counters and ratchet movements for meters.
5 six-inch spindles for gates.
2 four-inch spindles for gates.
2 three-inch spindles for gates.
3 horses.
6 wagons.
5 harnesses.
1 sleigh.
1 pung.
1 double-runner sled.
6 blankets.
1 buffalo robe.
2 oil covers for horses.

REPORT

OF THE

ENGINEER OF THE PUMPING STATION.

PUMPING STATION, CAMBRIDGE WATER WORKS,
CAMBRIDGE, Dec. 1, 1882.

Hiram Nevons, Esq., Supt. Cambridge Water Works: —

SIR, — I would report the engines and boilers in good condition, no extensive repairs having been required during the past year. The high-service engine, which was started on the 10th of June last, has run daily since that time, doing the work easily and satisfactorily. The metallic packing, fitted to piston rods and valve stems of engine No. 3 and to piston rods of engine No. 2, has worked perfectly, and I would recommend that it be fitted to engine No. 1. The auxiliary engine and pump are in perfect condition, and ready to be started when wanted.

Following will be found a statement of the expenses at the pumping station, together with the engine record, pond levels, and rainfall for the past year, also a list of stock and tools on hand.

E. C. BROOKS, *Engineer.*

Statement.

413 tons Cumberland coal @ $5.74	$2,370 62
$31\frac{1370}{2240}$ tons Cumberland coal @ $7 a ton	221 28
$229\frac{350}{2240}$ tons Cumberland coal @ $6.30	1,443 68
Oil, waste, packing, etc.	242 10
Repairs on engines and boilers	154 28
Repairs on buildings, and care of grounds	231 80
Tools	70 23
Salaries	3,360 00
Total	$8,093 99

Engine Record, Pond Levels, and Rainfall.

Date.	Low-Service Engines.						High-Service Engine,						Total Water pumped.	Daily Average Water pumped.	Total Coal consumed.	Daily Ave'ge Coal consumed.	Ave'ge Height of Pond.	Rainfall.
	Total Pumping Time.		Daily Average Pump'g Time.		Total Water pumped.	Daily Average Water pumped.	Total Pumping Time.		Daily Average Pump'g Time.		Total Water pumped.	Daily Av'age Water pum'd.						
	Hrs.	Min.	Hrs.	Min.	Gallons.	Gallons.	Hrs.	Min.	Hrs.	Min.	Gallons.	Gallons.	Gallons.	Gallons.	Pounds.	Pounds.	Feet.	Inches.
December, 1881.....	312	30	10	5	65,355,900	2,108,255	.....	....	....	....	.....	.....	65,355,900	2,108,255	112,900	3,642	11.37	3.30
January, 1882.....	360	5	11	37	76,165,800	2,456,961	.....	....	....	....	.....	.....	76,165,800	2,456,961	127,100	4,100	11.37	4.73
February, "	315	15	11	16	65,514,600	2,339,807	.....	....	....	....	.....	.....	65,514,600	2,339,807	114,100	4,075	12.58	4.48
March, "	322	25	10	24	66,408,000	2,142,190	.....	....	....	...	.....	.....	66,408,000	2,142,190	116,200	3,749	15.53	2.49
April, "	304	40	10	9	64,110,600	2,137,020	.....	....	....	....	.....	.....	64,110,600	2,137,020	111,000	3,700	15.61	2.27
May, "	344	55	11	8	74,975,700	2,418,571	.....	....	....	....	.....	.....	74,975,700	2,418,571	121,000	3,903	15.21	4.93
June, "	373	55	12	28	84,021,000	2,800,700	260	30	12	24	1,878,603	89,457	85,899,603	2,863,320	131,500	4,382	14.77	2.73
July, "	385	10	12	25	86,762,100	2,798,778	385	10	12	25	2,517,984	81,225	89,280,084	2,880,003	141,600	4,568	13.81	2.08
August, "	395	20	12	45	89,715,000	2,894,032	395	20	12	45	2,976,442	96,014	92,691,442	2,990,047	155,400	5,013	12.53	1.41
September, "	346	40	11	33	74,769,900	2,492,330	346	40	11	33	2,029,613	67,654	76,799,513	2,559,983	129,600	4,320	11.76	7.80
October, "	330	55	10	40	73,183,200	2,360,748	330	55	10	40	1,787,578	57,664	74,970,778	2,418,412	125,100	4,035	11.53	2.19
November, "	320	20	10	41	69,409,500	2,313,650	320	20	10	41	1,653,389	55,113	71,062,889	2,368,763	123,700	4,123	10.95	1.21
Total.....	4112	10	....	....	890,391,300	.....	2,038	55	....	....	12,843,609	.....	903,234,909	.....	1,509,200	.....	.....	39.62
Daily Average....	11	16	....	....	2,439,428	.....	11	43	....	....	73,814	.....	2,474,616	.....	4,135	.....	13.08	

Stock on Hand Dec. 1, 1882.

426$\frac{1}{2}\frac{8}{2}\frac{9}{4}\frac{0}{0}$ tons Cumberland coal; 3 gallons cylinder oil; 10 gallons machine oil; 35 gallons kerosene; 85 pounds cotton waste; 65 pounds rubber packing; 5 pounds asbestos packing; 20 pounds American packing; 2 cylinder-head gaskets; 24 9-inch rubber valves; 2 valve seats; 2 steam gauges; 10 pounds Babbitt metal; 1 pound solder; 2 pounds red lead; 10 pounds steel; 5 pounds sheet brass; $\frac{1}{2}$ bale hair felt; 70 pounds soap; $1\frac{1}{2}$ barrels fire clay; 200 common brick; 15 feet 5-inch belting; 5 files; $1\frac{1}{2}$ pounds emery; $\frac{1}{4}$ quire emery cloth; 10 gauge glasses; 8 lamp chimneys; 3 dozen lamp-wicks; 2 lantern globes; $\frac{1}{4}$ barrel brimstone; 300 pounds bolts and nuts; 25 pounds nails; 1 pair plungers and rings for No. 2 engine; 20 feet 2-inch brass pipe; 10 feet $1\frac{1}{4}$-inch brass pipe; 7 feet $\frac{1}{2}$-inch brass pipe; 26 feet 3-inch iron pipe; 10 feet $1\frac{1}{4}$-inch iron pipe; 30 feet $\frac{3}{4}$-inch iron pipe; 40 feet $\frac{1}{4}$-inch iron pipe; 2 $1\frac{1}{2}$-inch globe valves; 1 lot pipe fittings assorted sizes; 10 feet 24-inch flange pipe; 8 feet 6-inch flange pipe.

Tools, Furnitur , and Instruments.

1 18-inch × 10-foot engine lathe; 2 lathe chucks; 6 lathe dogs; 18 lathe tools; 1 grindstone; 1 3 × 9 engine, with shafting, belting, etc.; 2 vises; 1 vise bench; 1 set pipe dies; 1 set pipe taps; 1 set hand taps; 2 pipe cutters; 14 pairs pipe tongs; 2 hand hammers; 1 copper hammer; 18 cold chisels; 10 files; 6 screw wrenches; 2 Stillson wrenches; 22 fork wrenches; 27 socket wrenches; 1 hydrant wrench; 6 gate wrenches; 2 clamp screws; 1 sledge; 2 ratchets; 24 drills; 1 breast drill; 2 jackscrews; 6 steel bars; 2 soldering irons; 4 cylinder-head cranes; 12 eyebolts; 75 starting bolts; 2 starting keys; 1 chain fall; 1 level; 1 gasket cutter; 2 ladles; 4 wooden horses; 1 oil cabinet; 1 set measures; 1 10-gallon can; 1 6-gallon can; 3 3-gallon cans; 3 1-gallon cans; 2 lamp fillers; 2 funnels; 4 squirt cans; 1 oil pump; 1 carpenter's bench; 4 planes; 3 hand saws; 10 chisels; 7 gouges; 2 screw-drivers; 2 bit stocks; 13 bits; 4 augurs; 1 draw knife; 1 spoke shave; 2 axes; 2 mallets; 1 steel square; 1 set fire tools; 1 coal car; 1 pair platform scales; 2 wheelbarrows;

11 scoop shovels; 4 long-handled shovels; 2 picks; 1 tube brush; 1 forge; 1 anvil; 5 pairs tongs; 2 hand chisels; 1 lawn mower; 1 steel rake; 2 wooden rakes; 2 scythes; 3 forks; 1 weeder; 1 spade; 6 ladders; 3 step ladders; 1 cast-iron roller; 200 feet 2-inch hose and pipe; 100 feet $\frac{3}{4}$-inch hose and pipe; 1 desk; 2 tables; 2 clocks; 18 chairs; 9 mats; 6 spittoons; 1 water cooler; 6 fire pails; 6 water pails; 4 bracket lamps; 4 lanterns; 6 hand lamps; 1 lot cocoa matting; 1 watering pot; 1 feather duster; 1 dust pan; 2 dust brushes; 1 window brush; 1 floor brush; 1 scrubbing brush; 2 mops; 3 brooms.

Tools, Furniture, etc., at Engine House at Pond.

1 12-inch $\times$ 20-inch portable engine and boiler; 1 12-inch centrifugal pump and belt; 1 hand force pump; 30 feet 1-inch hose; 10 feet $\frac{3}{4}$-inch steam hose; 1 set fire tools; 2 oil cans; 2 bracket lamps; 2 chairs; 1 cot bed and bedding.

REPORT

OF THE

OVERSEERS OF THE POOR.

CAMBRIDGE, Dec. 1, 1882.

To the Honorable City Council of the City of Cambridge:—

GENTLEMEN, — The Board of Overseers of the Poor respectfully present the following report for the year ending Nov. 30, 1882.

There has been no material change in the system which was established in 1877 for the care of the poor of the city. The plan of central registration and thorough investigation is still in operation, and, in the judgment of the Board, is producing the best results.

In accordance with this plan 413 histories have been taken and placed on file within the year, including 1,549 individuals. Of these 547 have a legal settlement in Cambridge, 296 in other cities and towns, and 706 have no settlement. Partial aid outside of the almshouse has been given to 380 families, including 1,382 persons. Of these persons, 460 are settled in this city, 304 in other cities and towns, and 618 are State cases.

The cost of outside aid for the year was $13,607.91. This includes $6,149.32 paid for the care of the insane poor in State institutions.

The receipts from other cities and towns, and from the State, were $3,612.46. The net cost of aid given to the poor outside of the almshouse is, therefore, $9,995.45.

The Assistant City Physician, Dr. Obed C. Turner, continued to attend the sick poor, both without and within the almshouse, until his death on the thirtieth day of October, from typhus fever contracted while in attendance upon a family of immigrants. The family was immediately isolated and cared for until well in the "cottage" at the almshouse, the only hos-

pital for contagious diseases which the city possesses. Dr. Turner's death was a serious loss to the poor of the city and to the board, and he will be long remembered and regretted. The following particulars of the medical work of the year are taken from the records of Dr. Turner, with the exception of the last six weeks.

One hundred and fifty-three visits have been made at the almshouse, and 53 patients treated in the wards. Six cases of typhus fever have been treated in the pest-house. 2,595 visits have been made to 346 sick persons outside of the almshouse. 115 of these were settled in Cambridge, 61 in other cities and towns, and 170 were State paupers. 47 deaths have occurred, including 13 at the almshouse. Of these 16 were from consumption, and 11 from other diseases of the respiratory organs, including 2 from diphtheria and 1 from croup. 168 vaccinations have been made by order of the Board of Health.

Almshouse.

According to the report of the warden, 71 males and 51 females have been admitted within the year ending Nov. 30. This number includes 17 who were admitted on court sentences. Of these 11 were minors, nearly all of whom, as is usual, were sentenced for truancy.

Eighty-eight males and 53 females were discharged. 12 have died, including 1 case of still-birth. Of these 7 had been inmates for less than a month. Eight were more than sixty-five years old. Among those discharged were 14 children, who were provided for in benevolent institutions and private families, and 4 adults sent to the Soldiers' Home.

There remained in the almshouse, Nov. 30th, 69 males and 42 females; 25 of these were minors. Included in this total number are 21 chronic and harmless insane; 11 males and 10 females.

The personal property in the almshouse at the end of the year was valued at $14,142.98.

The City School, in the almshouse, conducted by Miss Julia S. Gushee, numbered at the end of the year 22, all of whom were boys. The school is in excellent condition.

The Farm and Ledge are worked almost entirely by the inmates of the house. The ledge also serves to furnish employment for able-bodied applicants for outside relief.

The receipts from the sale of farm produce are estimated at $2,992.

The expenditure for the almshouse was $17,736.83, and for the farm and ledge $1,307.69. Total, $19,044.52.

The total receipts were $3,768.05. Net expense of almshouse, farm and ledge, $15,276.47.

House Offal.

As was anticipated, the expense of collecting the house offal has been greater than hitherto.

Total expense	$9,222 77
Total receipts from sales	5,705 22
Net cost of collecting	3,517 55
An increase from 1881 of	1,976 51

Recapitulation.

Total expenditures	$41,875 20
Total receipts	13,085 73
Net expense to the city	$28,789 47

It should be borne in mind that the care of the house offal does not properly belong in any way to this department; and the cost entailed should not fairly be included. The actual cost to the city for the care of the poor for the year was $25,271.92. Of this sum $9,995.45 have been spent for the relief of the poor outside of the almshouse.

JAMES A. FOX,
CHARLES E. VAUGHAN,
SUMNER ALBEE,
J. C. WELLINGTON,
GEORGE D. CHAMBERLAIN,
EZRA PARMENTER,
} *Overseers of the Poor.*

REPORT

OF

THE CITY PHYSICIAN.

CAMBRIDGE, Jan. 31, 1883.

To the City Council of Cambridge :—

GENTLEMEN, — The following report of the doings of this office is submitted in accordance with the provisions of Chapter 25 of the Ordinances of the city of Cambridge.

One hundred and fifty-five visits have been made at the almshouse ; 53 patients have received medical treatment in the hospital wards of this institution ; 6 patients have been treated in the pest-house sick with typhus fever.

Two thousand five hundred and ninety-three visits have been made to the sick poor outside of the almshouse, in attendance upon 346 different persons ; of these, 115 have legal settlements in the city of Cambridge, 61 in other towns and cities, and 170 were State paupers.

Certificates of death have been made out, after proper examination, of 37 persons dying without a physician in attendance.

In connection with the health officer, 168 vaccinations have been made by order of the Board of Health.

Twelve women have been attended in child-birth.

Forty-seven deaths, including 13 at the almshouse, have occurred in this practice from the following causes : —

Consumption	16
Pneumonia	8
Cholera Infantum	3
Disease of brain	2
Old age	2
Infantile debility	2
Still-born	2
Diphtheria	2

Paralysis	1
Disease of kidney	1
Typhoid fever	1
Disease of heart	2
Cancer	1
Convulsions	1
Asthma	1
Dropsy	1
Croup	1
	47

Dr. O. C. Turner, who had performed the duties of Assistant City Physician since Feb. 1, 1880, died Oct. 31st of typhus fever contracted while in attendance upon the city poor. He died in the discharge of his duty, and will long be remembered for his simple, efficient, and honorable life. Upon him alone, during his term of office, rested the responsibility of the medical care of the poor of this city; their love for him living, and grief for him dead, are the best proofs of his good work.

Dr. R. Wetherbee has acted as Assistant City Physician since Dr. Turner's death.

Respectfully submitted,

H. P. WALCOTT,
City Physician.

REPORT

OF THE

COMMITTEE ON SOLDIERS' AID.

The Committee on Soldiers' Aid submits to the City Council its report for the thirteen months ending Nov. 30, 1882.

The amount paid as regular State aid was	$12,653 27
The amount paid to indigent soldiers and sailors was	3,944 27
The amount paid to the agent employed in the examination of settlements, etc., was	303 75
Printing	1 50
Total	$16,902 79

The amount received from the Commonwealth was	$15,255 07
The amount received from other towns and cities	268 00
	$15,523 07

There are now upon the State-aid list 197 persons, and upon the list of indigent soldiers and sailors, 42.

All of which is respectfully submitted,

NATHAN G. GOOCH,
JOHN READ,
GEORGE A. DAVIS,
JOHN W. FAIRBANKS,
LUCAS B. GROVER,
} *Committee on Soldiers' Aid.*

REPORT

OF THE

CEMETERY COMMISSIONERS.

To the Honorable City Council:—

The Board of Commissioners of Cambridge Cemetery presents herewith its twenty-ninth annual report, it being for the financial year ending Nov. 30, 1882.

In regard to the work accomplished by the board during the year there is little to add to what has been stated in previous reports. The same earnest desire to increase, as far as possible, the attractiveness of the grounds, that has marked the efforts of its predecessors, has been the ever-present incentive of this board, stimulating it to more active endeavor to make beautiful this resting-place of our dead.

The appropriation made at the beginning of the year for cemetery purposes was the amount estimated as the revenue for the period of twelve months from December, 1881, to November, 1882, inclusive, viz. $12,500 00
Amount of additional appropriation . . . 1,144 25

Total $13,644 25

The amount expended from November 1st, 1881, to November 30th, 1882, a period of thirteen months, was $13,644 25

The additional appropriation was rendered necessary, in part, in order to correct a difference heretofore existing in the months comprising the financial year, in reference to the receipts and expenditures in all the appropriation accounts.

This difference was as follows: The yearly treasury receipts have heretofore been included within a year represented by the

months from December to November, inclusive, while the expenditures have been comprised within a year including the months from November to October, inclusive. The correction of this disagreement, so as to cause both the receipts and expenditures to be included in a year composed of the same months, made it necessary that the month of November should, so far as concerned the expenditures, be added to the financial year of 1882. The year was thus made to comprise thirteen months, and the additional sum required for the ordinary expenses of the cemetery for the month so added, was . . $594 09

Amount of additional pay-roll for September, authorized by City Council	550 16
Total additional appropriation . . .	$1,144 25

Following is a detailed account of the receipts and expenditures: —

RECEIPTS

From December, 1881, *to November*, 1882, *inlusive*, *twelve months.*

For Burial fees	$1,473 75
Burial lots	7,474 24
Care of lots	3,116 32
Foundations	422 49
Hay	10 00
Interest on perpetual care of lots	228 00
Myrtle	166 50
Top-dressing lots	102 25
Wood	24 75
Total receipts at cemetery	$13,018 30
Excess of expenses over receipts, paid from City Treasury	625 95
Total	$13,644 25

EXPENDITURES

From November, 1881, *to November*, 1882, *inclusive*, *thirteen months.*

For Blank deeds	$9 50
Car tickets	20 00
Cement	59 50
Coal	55 00
Cutting figures	3 91
Directory	2 50
Expressage	1 55
Hardware and tools	173 16

For Heating apparatus	$22 35
Labor, as per pay-roll	9,052 45
Labor, extra	75 63
Lime	1 25
Lumber	62 97
Manure	229 68
Marble tablets	79 50
Oil	1 25
Ploughing snow	21 00
Postage stamps	26 00
Printing	23 75
Repairs	15 79
Sods and loam	1,211 02
Stationery	9 39
Stone posts	424 21
Stones for foundations	26 00
Stones for numbering lots	123 12
Stones for paving and ballast	27 36
Superintendent's salary	1,408 29
Supplies	32 68
Teaming	68 66
Trees and plants	237 09
Water	139 69
Total	$13,644 25

The number of interments during the year is	566
The whole number of interments in the cemetery is	12,502
Number of lots prepared during the year	131
Number of lots prepared and now ready for sale	130
Estimated value of such lots	$25,986 04
Amount received in 1882 for perpetual care of lots	1,150 00
Amount of perpetual fund for the same	4,400 00

The necessity of enlargement of the cemetery grounds presses more and more upon the consideration of the board, and it would seem that the City Council should no longer delay in making provision for the purchase of more land for the purpose. Partial negotiation has already been made to this end, but no definite results have as yet been attained. It is hoped that the matter of such purchase may, during the coming year, be more fully considered, and some decision arrived at. Although there is a sufficient number of ordinary grave lots for the present needs, the single lots are nearly all disposed of.

An event which occurred during the year in connection with

the affairs of the cemetery is of such importance that it should receive notice in this report. On the 14th of last October, in the forenoon, Mr. Charles S. Childs, employed upon the grounds as foreman, was assaulted in an aggravated and nearly fatal manner, while on his way from the City Treasurer's office to the cemetery. He had visited the City Hall to obtain the money due upon the monthly pay-roll for September, and had nearly reached the grounds, driving thereto in the superintendent's carriage. In passing through Coolidge Avenue, he saw two men standing beside a horse and buggy, and apparently endeavoring to repair some injury to their buggy. Upon reaching the strangers, Mr. Childs was asked by one of them if he had a piece of rope or strap he could give them to repair a broken spring. He stopped his team and sought to find under the seat the article desired; and while in the act of looking for it, one of the men made a grab for the box containing the money received from the City Treasurer, in the custody of Mr. Childs, and which was on the carriage seat. Mr. Childs seized the hand of the robber and attempted to drive his horse away. In endeavoring to grasp the reins, he was surprised to find they had been cut, as also had the breast-plate of the harness. He then leaped from his carriage, and grappled with the man who had possession of the box, but was immediately struck a ringing blow on the head, with some hard substance, by one of the robbers, who thereupon took to their vehicle and drove away with the money thus murderously obtained.

Mr. Childs was taken to his home near the cemetery and medical assistance immediately called. He was found to have sustained a severe wound over the left temple, and the skull was fractured. The injured man lay in a very critical condition for many days, but subsequently became convalescent, and was at length able to confront parties who had been arrested on the charge of having made the assault and robbery. The police were active in ferreting out those whom they believed to be the criminals, and they have accordingly been arrested and fully committed for trial.

The sum of $550.16, which was thus taken from Mr. Childs, was subsequently authorized by the City Council to be again paid from the City Treasury, upon a duplicate pay-roll for the

month of September, and the same is a part of the extra appropriation for the year.

The assault and robbery of Mr. Childs took place, as has been stated, in the forenoon, and upon an avenue which has not heretofore been regarded as requiring special protection on the part of the police.

It is believed that the arrangements now in vogue for the transmission of the monthly wages of the cemetery laborers will preclude any future attempt improperly to obtain the money while in charge of the messenger from the cemetery.

In what has hereinbefore been said, it has been the desire of this board to bring to notice such matters in connection with the cemetery as relate to its permanent welfare.

Allusion was made in the report for 1881 to the fact that those entering the Cambridge Cemetery from this city are obliged to cross the borders of Watertown. The remedy proposed for this was, that a roadway should be laid out from Mount Auburn Street, between Sparks and Lowell Streets, leading to the cemetery. This road would extend along the banks of the river, and an entrance to the cemetery could be effected on its easterly side. The reasons for the construction of this highway seem forcible enough when it is urged that there would be a large reduction in the distance to be travelled, while the hill near the present entrance would be avoided. This, and other proposed improvements, are commended to the judgment of the City Council, to be acted upon whenever the condition of the treasury shall permit, without increase of taxation or detriment to other interests.

The amount required for cemetery purposes for the year 1883 is estimated at $12,500.

The receipts are estimated at $12,500.

All of which is respectfully submitted,

JAMES A. FOX,
WILLIAM PAGE,
SILAS B. BUCK,
GEO. S. SAUNDERS,
JOHN F. O'BRIEN,
GEO. T. GALE,
CURTIS DAVIS,

Commissioners of Cambridge Cemetery.

REPORT

OF THE

SCHOOL COMMITTEE FOR 1882.

As this report is accompanied and supplemented by the detailed and accurate report of the Superintendent of Schools, all that is necessary here is to present concisely the statements of the subcommittees on the several departments, with a few suggestions on matters thought to be important.

The Schools.

If a new-comer, solicitous of information about our public schools, were to ask their number and character, the answer would be as follows: We have in Cambridge, 1 High School; 8 Grammar Schools; 23 Primary Schools; 1 City, or Reformatory School; and 2 Evening Drawing Schools. Taking them in the order of their importance, we begin with the

Primary Schools.

In these there are over 80 female teachers, with an average of about 46 pupils, or perhaps twice as many as can be satisfactorily taught and studied, for the children need to be studied as well as the books, in order to attain the best results. It is not, however, our purpose to advocate the immediate opening of a score of additional class-rooms, with a corresponding increase of teachers, advantageous as such a step would be.

There is much, very much, to commend in the methods of teaching seen in these schools, yet there is room for care, lest, in gaining the brightness and pleasantness of so much oral instruction, something should be lost in the power of the pupil to acquire knowledge from his book, — a loss sure to tell against him when transferred to the grammar school. It is recommended that after the third grade, the child should not be

allowed to depend largely on the words of the teacher, but should constantly be encouraged to have recourse to the printed book; should be made, in short, to work for himself. On leaving the primary school, it is not enough that he is expert with voice and pencil. Books are all along the tools with which he must work. He will learn much from human speech, much from observation of things and of persons; but he is, in his school life, to learn to use books, and to form for future advantage and enjoyment the habit of seeking in them for knowledge; and this habit should begin in the primary school, with its speller, and reader, and arithmetic.

The writing of these children of from five to nine years is strikingly good, varying but little in excellence among the schools. The reading is more unequal in merit, and there is a great disparity in the order and discipline of the several schools. An attention always alert, a pressure as firm and constant as it is gentle, a tenderness never intermitted, a justice tempered with mercy but not tainted with weakness, — these are the needed qualifications of the teachers intrusted with the training of the 3,850 children in our primary schools.

Grammar Schools.

The grammar schools are eight in number. The teachers consist of seven masters, and not far from ninety female teachers, with an average of thirty-eight or forty pupils.

If, at some future time, a suggestion in our last annual report should be carried out, and a sub-master be appointed to each of our large grammar schools, the corps of teachers in the schools below could at once be increased by six or seven of the present teachers in the grammar classes, with advantage to both sets of schools.

Let us assume that the boys and girls in the grammar schools are about equal in numbers, and inquire how many, if fairly divided, fall under the oversight and control of each of the seven grammar-school masters. The number is 275. Two hundred and seventy-five *boys!* What ability, what zeal, what toil, what time are sufficient for such a charge?

In these our schools, we are to-day preparing nearly four thousand readers, all needing guidance, restraint, or encouragement

as to what they read. An order of the School Board at the November meeting instructed the superintendent to "prepare and print a list of such books as are desirable or proper for general reading by the pupils of the public schools; also, of such as are especially useful for reading or reference in connection with their studies." The teachers, too, it is believed, advise and assist in the choice of books, and there is, at all times, the ready help of the librarian at the public library.

But well-chosen books, and the intelligent comprehension of what is read, are not the whole equipment to be furnished. We cannot urge too strongly the importance of reading well aloud. Absolutely good reading is a great and rare accomplishment. When one considers the noble thoughts contained in books, the fine strains of poetry, the majestic sentences of the best prose, and then observes how these good things are spoiled by careless and slovenly reading, it would seem that the written has far outstripped the spoken word. Yet what pleasure good reading gives! How people listen entranced as the musical sentences fall on the ear, and the mind receives from them, when most familiar, a vividness of impression never experienced when they merely meet the eye!

In our schools there is sometimes a rough, defiant way of reading among the boys which needs softening, while the tendency of the girls is towards an affected rather than a natural manner. Over-frequent class recitations may be attended with some danger of forming a staccato, spasmodic style, instead of a continuously flowing and smooth one. It is noticeable, too, that the effort at proper emphasis induces often a leaning on unimportant words, the pronouns, for instance, as thus: "And he said, saddle *me* the ass; and they saddled *him*."

It is everywhere felt that the present education is lacking in the moral direction; that the intellectual work has become all-absorbing and important. Yet the laws of the Commonwealth make it the duty of all instructors of youth to teach certain principles and virtues, and to point out the evil tendency of the opposite vices. (See Public Statutes, Ch. 44, Sect. 16.)

It is thus fully within the scope of his duty when the master of our largest grammar school makes a serious effort to arrest

the habit of smoking among his boys by showing them how it impairs their healthy growth, their scholarship, and general tone of character. All parents should feel grateful to the principal of the Webster School for his attempts in this direction. They have been gentle and wise, and deserve recognition from the committee.

Cambridge is largely concerned in the manufacture of cigars and cigarettes, thus offering special temptations to the boys who see their parents and elders at work upon tobacco, and some of whom, perhaps, are themselves, at odd hours, employed in its manipulation.

Prophecies are current, whose fulfilment will not long delay, that there is to be in our schools some degree of training in the industrial arts. This committee may not live to see instruction given in the use of tools for working in wood and metal, in gardening, and the preparation of food and clothing, but that will probably be the next turn in school affairs.

The subject of summer or vacation schools is well worthy of attention. There are seven or eight weeks when many of our young children have nothing to do but to wander about the streets through the long days of July and August. The cost would be little, the gain much, if, in one or two of our more populous wards, school-rooms were opened, and some instructive and pleasant occupation provided.

English writers on rural customs tell us of the practice of whipping boys round the parish boundaries, in order to keep in memory the old limits and landmarks. We should like, without recourse to whipping, to cultivate in our children an accurate knowledge of their surroundings. Can all in the upper classes of our grammar schools name the towns adjoining Cambridge, and their direction from us? Is no one ignorant of any especial claim his own city has on his regard? Let some pains be taken to inculcate a love for this distinguished city of Cambridge, for its localities, its historic places, houses, trees; let some information be given of its famous men, — its authors, its college presidents, its mayors, its successful business men, its prominent professional men, its benefactors, its artists, its skilled mechanics and inventors, its history in short, "the footprints in the sands of time." More useful this, more interest-

ing, than the precise depth of the river Yang-tse-Kiang, or the height, to an inch, of the tower of Pisa.

The High School.

The High School demands no extended report. Its corps of teachers remains unchanged since the last was written. One, who, early in the year, was away on account of illness, has returned, and is again doing as excellent work as ever. Another, whom the school committee of a neighboring city sought to win from us, was prevailed upon to remain. Mr. Sargent's success in the school attests the wisdom of the committee of 1881 in making their selection. In June last his salary was made the same as that of the two sub-masters just above him.

As in former years, the Cambridge High School has maintained its relative rank among the schools of the Commonwealth, and, as in former years, the number of girls receiving diplomas has greatly exceeded the number of boys. In 1882 they were nearly three times as many, — 49 girls to 17 boys. This, however, is a larger disproportion than usual, and the same degree of inequality does not exist throughout the lower divisions of the school. There are at present in the school 239 girls, and 178 boys, or about four to three. Of the whole number, 417, probably one fourth are preparing for college.

During the year a catalogue and history of the school has been prepared, giving a complete list of teachers and graduates from the establishment of "The Central High School" in 1847 down to the present time. To those interested in educational history, especially to those interested in the High School of this city, this book will be valuable.

A noteworthy event in the history of the school during the past year was Miss Peirce's completion of her thirtieth year of instruction in its different departments, — a fact indicating at once the high qualities of that lady as a teacher, and the intelligent appreciation of her merits by successive committees.

The Training School.

In June, 1882, Mrs. Sullivan, the principal of this school, announced her decision not to be a candidate for re-election.

She had been connected with the school during most of its existence, and was identified with its methods and its life. While presiding over the Training School, she had won the warm regard of those familiar with its work, and the influence of her character and spirit will not soon pass from the minds or hearts of her many grateful pupils.

There was no election of a successor to Mrs. Sullivan, and the school was not reopened after the summer vacation; but an order was passed by the committee, "that a training class should be established, the members to act as assistant teachers, and as substitutes, whenever necessary, in the various grammar and primary schools." In pursuance of this order, the graduates of 1882 are now thus employed.

The City School.

Chapter 30, Sect. 4, of the City Ordinances, is as follows: —

"Any minor between the ages of seven and fifteen years, convicted of being an habitual truant, having no lawful occupation or business, not attending school, and growing up in ignorance, shall be committed to the almshouse for such time, not exceeding two years, as the Justice of the District Court may determine. The almshouse of the city of Cambridge is the institution provided for the confinement, discipline, and instruction of such children."

This school at the almshouse is, at present, composed solely of boys, twenty-one in number, fourteen of whom are under sentence, as above provided. The school-room scene here is one of the most pleasant in the city. The large, light, airy room, the tall window filled with plants, and these unfortunate, but cheerful, and here well-behaved boys, make an agreeable picture. The children are doing well in their lessons, considering the frequent changes in the school. Boys who are sentenced for six months, just begin to make perceptible progress when their time is up, and they go elsewhere.

The teacher speaks gratefully of the kindness and aid afforded to her by the warden and matron in charge.

The death of Dr. Turner, chairman of the subcommittee on this school and attending physician at the almshouse, should be mentioned as a serious loss to the school, and an occasion of sincere sorrow to the School Board.

Drawing.

The free evening drawing schools are of two classes, both under the direction of Mr. Woodman. The subjects taught in the mechanical class, mostly workers in wood and stone, are geometry and projection, building construction, machine draughting, and isometric drawing. The largest number present on any evening is reported at 48. The average attendance, 24.

The free-hand class study light and shade in crayon and indian ink, from models of geometric form and from the cast; outline drawing from the same, and from flat copies in pencil. Lectures and illustrations are given on designs for manufactured goods and interior decoration. Several students in the class have finished designs in color, producing excellent patterns for calico, tile, wall-paper, and china ware, and manifesting decided interest in their work. Whole number registered, 67; average attendance, 42. It would be well if some method could be adopted for securing greater regularity in this respect.

Drawing is one of the prescribed studies in all our primary and grammar schools. It is taught according to the system of Prof. Walter Smith.

Music.

There is always a word of approbation to be said with regard to this branch of study. The practice of "the divine art" is the golden thread in the dull web of the smaller children's educational course, relieving the tedium and monotony of the long day, and affording a legitimate safety-valve for their pent-up energies. With the more advanced pupils, instruction is given in the best method, faithfully and thoroughly, laying a foundation upon which, in after life, the pupil may build as much as he will, with nothing to be unlearned.

The ear for music is to be educated as the hand is trained for drawing or writing, as the eye is taught to see what is before it. A clergyman of this city, who is conversant with the subject, and who has visited our grammar schools during the hours of tuition in music, was asked for his opinion by the committee. He expressed himself as pleased and surprised at the excellence of the results obtained. He was especially struck with the

variety and scope of the lessons given, and the manner in which they were adapted to the different classes.

Salaries.

There have been some changes in salaries during the past year.

On the petition of four of the female teachers in the High School, their salaries were increased to $950 each, an aggregate increase of $500 a year upon the four salaries.

On the petition of a large number of the teachers in the primary schools, the salaries of the principals in those schools were raised from $600 to $620; of the other teachers in those schools, from $580 to $600 (twenty dollars in each instance). This increase will add about $1,500 per annum to the salary list.

The appropriation for salaries of teachers will therefore be about $2,000 in excess of the previous year.

A comparison of the salaries paid in Cambridge with those paid by the other cities of the Commonwealth shows that, on the average, the salaries here are higher than in any other Massachusetts city except Boston.

The committee anticipates no difficulty in securing competent teachers at the salaries now paid, and sees no necessity for making any further increase for the present.

School-Houses and Health.

One new school-house has been built during the year, which has been named the Tarbell School-house, in token of respect to the memory of Miss Mary Ann Tarbell, a faithful teacher in our primary schools for thirty-five years. It contains four rooms, and is occupied by three primary classes, and one grammar class from the Webster School.

More school accommodation is still called for, and improvement is greatly needed in our older school-houses While in any building the teachers suffer from irritation of the throat, caused by inhaling the gases from the basement, while in any the windows cannot be opened without admitting unpleasant odors, we have little ground for satisfaction as to our success in the department of hygiene.

In fact, and speaking more plainly than is agreeable, there is a very low degree of civilization exhibited in the arrangement of the offices and appurtenances of our schools. In many instances the dressing-closets are too narrow for convenient or orderly use; and there are other things, abhorrent to every sense, and disgraceful, which, year after year, the reports of the School Board have mentioned with regret, adding usually the expression of hopes, not yet realized, of a speedy and thorough reform. For these evils, whether in the basements or in the yards, the present committee does not hold itself responsible, nor does it lay blame upon the janitors, nor on the Committee on Public Property. There is an essential vice of construction, our inheritance from former less careful and less crowded times.

We are not prepared to assert, we do not believe, that Cambridge is more unfortunate or more unwise than her neighbors in these respects, but we do state earnestly and emphatically that we find urgent need of more air, more light, more space, and more care in these so important sanitary arrangements.

Pains are taken in all our better homes to keep the children's delicacy unimpaired. They are sent to schools where 400, 500, 600 boys and girls are at once placed under an almost absolute necessity of a violation not only of delicacy, but of decency.

It is hardly too much to say, that of one thing we are confident: Could the parents, especially the mothers of boys, inspect these out-of-door and in-door offices, such a public opinion would find voice as would cause things to be instantly amended, or would have the schools abolished.

Examination of Teachers.

The Committee on Examination of Teachers has visited thirty-one new teachers during the year. A few of these have been visited more than once by some members of the committee, by which it will be seen that considerable time has been given to this important part of our work. The result of the examinations is as follows: Of the fifteen nominated to positions in the grammar schools, twelve have been confirmed, and three rejected; of the eleven nominated to positions in the primary schools, ten have been confirmed, and one rejected. There were five nominations, four to the primary, and one to the grammar

schools, which have not yet been approved by the committee, their work thus far proving unsatisfactory, and they have been referred to the committee to be appointed for next year for further examination. The committee has kept in view the interest of the schools, in this examination of the teachers referred to it, while it has also sought to be just in its judgment of their work. We have found some teachers deficient in government and defective in their methods of teaching, while some have manifested a loud or boisterous manner not desirable in a school-room, and a few have been deficient in that culture which every teacher ought to possess. If we are to maintain the high standard of our schools, we must seek for teachers who will do good work, set a good example, and exert a refining influence. We must not employ and retain inefficient teachers, and for these reasons, with others that might be offered, it is the duty of this committee to look well to the ability, culture, and efficiency of the teachers referred to it. The labor which this work involves will be made light if the various subcommittees will all exercise due care in their appointments. We repeat with *emphasis*, what was said last year, that "the schools of Cambridge exist for the good of the children, and not for the purpose of giving places to inefficient teachers, even though they may be residents of the city."

Text-Books.

The policy which has long been pursued by the committee with regard to the change of text-books has been continued. No change has been made, but the freedom of teachers and scholars has been enlarged. The number of writing books permitted has been increased by one, and, in accordance with the action of the committee, the reading of the sixth class in the grammar schools is no longer confined to a single book in the graded series of Readers, but several have already been placed upon the list, from which teachers may draw at pleasure; and an attempt has been made to cultivate the taste and interest of the pupils by placing before them a little volume devoted to selections from Hawthorne's writings. Your committee will follow the experiment thus initiated with great interest and

watchfulness. It is a deliberate attempt at giving literature "fair play" in the schools. It cannot be said that graded reading books serve to give either a love or a knowledge of literature, and if, as is believed, the years spent in school are those when pure literature may make a deep and lasting impression on the mind, then it becomes a prime necessity that the schools shall furnish an opportunity for this impression. An American author has been chosen whose work is of a high order, and who is yet in sympathy with childhood, and, short as the experiment thus far has been, enough has been seen to justify your committee in continuing the policy until every scholar leaving our grammar schools shall have made a familiar acquaintance with six or eight of the great masters of literature.

Truant Officers.

The discipline, attendance, and general efficiency of our schools are greatly benefited by the vigilant services of the truant officers. There are only three for the entire city, and the large number of schools allotted to each, and the great extent of territory in their districts, make their labors arduous. Their services are of great value to the city. The citizens appreciate the benefit that comes from their efforts to promote prompt and constant attendance at school, while the parents, as a rule, co-operate with them. It would be impossible to conduct the schools with any degree of efficiency without them.

JAMES A. FOX, *Chairman, ex officio.*
HORACE E. SCUDDER,
JOHN L. HILDRETH,
CLEMENT L. SMITH,
PHEBE M. KENDALL,
BENJAMIN F. TWEED,
HENRY N. TILTON,
JOHN O'BRIEN,
EDWARD B. MALLEY,
JOHN CONLAN,
SARAH S. JACOBS,
WILLIAM H. ORCUTT,
ASA P. MORSE,
WILLIAM A. START,
ALBERT M. BARNES,
} *School Committee.*

TABULAR VIEW

OF

THE PUBLIC SCHOOLS OF CAMBRIDGE,

JANUARY 1, 1883.

Name of School.	Teachers.	Salary.	No. of Scholars Jan. 1, 1883.
High School,	William F. Bradbury	$2,800	412
	Theodore P. Adams.....	2,000	
	John Orne, Jr.....	1,700	
	Edwin L. Sargent.....	1,700	
	Solon F. Whitney.....	1,700	
	Hannah Gleason.....	950	
	Mary C. C. Goddard	800	
	Margarette M. Leighton..	800	
	Emma F. Monroe.....	950	
	Mary F. Pierce.....	950	
	Louisa P. Parker	800	
	Emma A. Scudder.....	950	
Allston Grammar,	Benjamin W. Roberts....	1,900	586
	Mary I. Vinton.....	700	
	Mary K. Bush.....	620	
	Mary M. Brigham	520	
	Mary Blair.....	520	
	Carrie Close.....	620	
	M. E. Dickson.....	620	
	Emma A. Eaton.....	620	
	Hannah L. Hill.....	620	
	Melissa M. McKinley	620	
	Emily R. Pitkin	620	
	Ida G. Smith.....	620	
	Carrie M. Williams	570	
Corlett Grammar,	Fannie P. Browning	620	61
	Emma C. Edson.....	620	
Harvard Grammar,	James S. Barrell	1,900	585
	Ada H. Wellington	700	
	Margaret B. Wellington..	620	
	Susan F. Athearn.....	620	
	Clara Bancroft	620	
	Emily F. Damon.....	620	
	Mary F. Emerson.....	620	
	Myra I. Ellis.....	620	
	Estelle J. French.....	620	
	Frances Fabyan	620	
	Sarah E. Golden.....	620	
	Annie M. Leland	620	
	Susan E. Merrill.....	620	
	N. Maria Stevens.....	620	
Putnam Grammar,	Thomas W. Davis.....	1,900	478
	Eliza M. Hussey.....	700	
	C. E. Doran.....	620	
	Anna B. Josselyn.....	620	
	Annie Knapp.....	620	

TABULAR VIEW OF THE PUBLIC SCHOOLS — *Continued.*

Name of School.	Teachers.	Salary.	No. of Scholars Jan. 1, 1883.
Putnam Grammar,	Augusta G. Mirick	$620	
	Eliza A. Paddock	620	
	Maria E. Spare	620	
	Martha R. Smith	620	
	Annie L. Savage	620	
	Alice L. Watts	520	
	Sarah A. Fell	520	
Shepard Grammar,	Edward O. Grover	1,900	439
	Ellen M. Jennings	700	
	Eva W. Cook	520	
	Dana A. Eveleth	620	
	Emily F. Fessenden	620	
	Nellie A. Hutchins	620	
	A. Estelle Ingraham	620	
	Ruth E. Lander	620	
	Evelyn J. Locke	620	
	Julia H. Osgood	620	
	Sarah A. Rand	620	
Thorndike Grammar,	Ruel H. Fletcher	1,900	526
	Lelia A. Mirick	700	
	Grace W. Fletcher	620	
	Emma A. Hopkins.	620	
	Abby A. K. Howard	620	
	Elizabeth G. Hutchinson	520	
	Martha A. Martin	620	
	Mary A. A. McCarthy	620	
	Mary E. Nason	620	
	Elizabeth P. Regal	620	
	Isabella B. Tenney	620	
	Abby S. Taylor	620	
	Lydia A. Whitcher	620	
Washington Grammar,	Daniel Mansfield	1,900	567
	Caroline J. Dresser	700	
	Lily B. Atherton	620	
	Carrie A. Cooke	620	
	Lucy A. Downing	620	
	Emma P. Eaton	620	
	Carrie H. Hazeltine	620	
	Mary H. Hanks	620	
	Adeline M. Ireson	620	
	Adelaide A. Keeler	620	
	Adelaide A. Keith	620	
	Hattie Shepard	520	
	Abby M. Webb	620	
	Mary A. Wheeler	620	
Webster Grammar,	John D. Billings	1,900	683
	Lizzie C. Capen	700	
	Marion H Burnham	620	
	Ella E. Buttrick	620	
	Charlotte M. Chase	620	
	Alice K. Crosby	520	
	Mary J Folsom	520	
	Esther F. Hannum	620	
	Carrie M. Kingman	620	
	Anna S. Lamson	620	

TABULAR VIEW OF THE PUBLIC SCHOOLS — *Continued.*

Name of School.	Teachers.	Salary.	No. of Scholars Jan. 1, 1883.
Webster Grammar,	Clara E. Matchett	$620	
	Rebecca Nickerson.....	520	
	Alice C. Phinney	570	
	Mary E. Towle	620	
	Mary A. Townsend	620	
	Lillie A. Woods.....	620	
	Ella C. Whitney.....	620	
Boardman Primary,	Mary A. Lewis	620	368
	Augusta L. Balch.....	600	
	S. N. Chamberlain.....	600	
	Mary E. Jennings.....	400	
	Elizabeth J. Karcher.....	500	
	Sarah E. Stewart	600	
	Evelyn A. Sawyer.....	600	
Bridge Primary,	Elizabeth E. Dallinger ...	620	80
	Emily C. Dallinger	600	
Cushing Primary,	Isadore I. Foster.....	620	81
	Winona Abercrombie	500	
Dana Primary,	Maria F. Williams.....	620	111
	Abby A. Lewis.....	600	
	Cordelia J. French.....	200	
Dunster Primary,	Susan E. Wyeth.....	620	79
	Sarah B. Waite.....	600	
Felton Primary,	Sarah J. Gunnison.....	620	142
	Florence A. Davis	400	
	Fannie C. Hartwell	500	
Gannett Primary,	Sarah J. A. Davis	620	172
	Anna M. Jones.....	600	
	Mary A. Rady...	600	
	Carrie H. Smith	600	
Gore Primary,	Frances E. Pendexter	620	463
	Addie M. Bettinson	600	
	Mary A. Bourne.....	600	
	Maria J. Bacon.....	600	
	Sarah D. Graham.....	600	
	Elizabeth B. Gahm	400	
	Lizzie J. Hawkins	500	
	Mary E. Mulloney.....	600	
	Nellie L. Pike.....	600	
Harvard Primary,	Helen M Ward.....	620	105
	Ellen A. Cheney.....	600	
Holmes Primary,	Marianne M. Webb.....	620	191
	Mary L. Bullard.....	600	
	Ellen M Cyr.....	600	
	Isabel Foster.....	400	
Lake View Primary,	Sarah M. Grieves.....	200	20
Lassell Primary,	Nellie F. Ball.....	620	208
	Ella R. Avery	600	
	Cora A. Reycroft	500	
	Frances E. Whoriskey....	500	
Mason Primary,	M. Lizzie Evans	620	127
	Josephine H. Davis	600	
	M. Lizzie Ford	200	
Otis Primary,	Luvia Goodnow.....	620	396
	Fannie Allen.....	600	

TABULAR VIEW OF THE PUBLIC SCHOOLS — *Continued.*

Name of School.	Teachers.	Salary.	No. of Scholars Jan. 1, 1883.
Otis Primary,	Martha H. Butler.....	$600	
	Josephine M. Doherty....	600	
	Ellen N. Leighton	600	
	Mary E. Smallidge.....	600	
	Ellen C. Walsh.....	600	
	Kate F. Wellington.....	600	
Quincy Primary,	Charlotte E. Jewell	620	136
	Lucy C. Wyeth.....	600	
	Lucy E. Cyr	200	
	Mary M. Tingey.....	200	
Reed Primary,	Mary E. Parsons.....	620	141
	Harriet N. Keyes	600	
	Margaret Kidd	600	
Riverside Primary,	Elizabeth A. Tower.....	620	179
	M. Louise Akerman.....	600	
	Amanda M. Alger	600	
	Florence M. Hayward....	600	
Sargent Primary,	Frances J. Harrod	620	221
	Mary A. Brown	600	
	Eliza J. Mitchell.....	500	
	Mary E. Woodman	600	
Tarbell Primary,	Evelina Brooks.....	600	154
	Mary H. Ross	500	
	Annie C. Teel.....	400	
Willard Primary,	Amelia Wright	620	450
	Louise W. Harris.....	600	
	Harriet A. Hamlen.....	600	
	Mary E. G. Harrington...	500	
	Kate M. Lowell.....	600	
	Emma C. Otis.....	600	
	Mary E. Sawyer.....	600	
	Laura Wright	600	
	Grace R. Woodward.....	600	
Wyman Primary,	Fannie E. M. Dennis.....	620	209
	Letitia Dennis.....	600	
	M. Carrie Dickman	600	
	Mary M. Gilmore.....	600	
Agassiz School,	Charlotte A. Ewell.....	620	227*
	Maria L. Baldwin.....	500	
	Emma A. Child.....	500	
	Ella E. Coye	400	
	Rosina C. Karcher.....	400	
City School,	Julia S. Gushee.....	620	20†

TEACHER OF SINGING. — Nathan Lincoln $1,700

SUPERINTENDENT OF SCHOOLS. — Francis Cogswell 2,700

* Including a Grammar Class (47), and Primary Classes (180).

† Including Grammar Scholars (10), and Primary Scholars (10).

SUMMARY.

Number of pupils in High School	412
" " Grammar Schools	3,982
" " Primary Schools	4,223
	8,617

COST OF INSTRUCTION.

High School	$16,100 00	for each pupil	$39 08
Grammar Schools	71,660 00	" " "	17 99
Primary Schools	46,800 00	" " "	11 08
Music	1,700 00		
Salary of Superintendent	2,700 00		
	$138,960 00	For each pupil	$16 12

Number of pupils belonging to Public Schools, Jan. 1, 1883	8,617
" " " " " Jan. 1, 1882	8,169
Increase	448

Average annual increase of pupils from 1860 to 1874 inclusive	246
Decrease of pupils, 1875	268
Increase of pupils, 1876	6
Decrease of pupils, 1877	81
" " 1878	50
Increase of pupils, 1879	57
" " 1880	286
" " 1881	403
" " 1882	448

Number of distinct schools	32
" " separate rooms	184
" " teachers	200

REPORT

OF

THE SUPERINTENDENT OF SCHOOLS.

To the School Committee of Cambridge: —

I RESPECTFULLY submit the following as my report for the year ending Dec. 31, 1882, it being my eighth report, and the fourteenth of the series of annual reports of the Superintendent of Public Schools.

SUMMARY OF STATISTICS.

I. — POPULATION.

Population of Cambridge by the State census for 1880	52,740
The number of children in the city between five and fifteen years of age, May 1, 1882, as reported by the officers appointed to ascertain the fact	10,370

II. — SCHOOLS.

1 High School, with eleven separate rooms.
8 Grammar Schools, with eighty-eight separate rooms.
23 Primary Schools, with eighty-five separate rooms.
2 Evening Drawing Schools, with two separate rooms.

Whole number of Day Schools	32
Whole number of separate rooms	184

III. — SCHOOL-HOUSES.

For the High School	1
For the Grammar Schools	8
For the Primary Schools	21

IV. — TEACHERS.

Number of teachers in High School	12
Male teachers, 5; female teachers, 7.	
Number of teachers in Grammar Schools	97
Male teachers, 7; female teachers, 90.	

Number of teachers in Primary Schools	90
Number of teachers in Evening Drawing Schools	4
Whole number of teachers in Day Schools, including teacher of music	200
Number of resignations of teachers holding permanent positions	17
Number of permanent appointments	25
Number of teachers who have attended Normal Schools	125
Number of teachers who have graduated from Normal Schools	112

V. — Pupils.

Attendance at all the Day Schools, 1878 to 1882.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1878	8,554	7,028	6,457	91.8
1879	8,500	6,957	6,385	91.8
1880	8,537	7,175	6,614	92.2
1881	8,912	7,434	6,759	91.0
1882	9,395	7,898	7,231	91.5

Attendance at the High School, 1878 to 1882.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1878	503	456	432	94.9
1879	504	455	424	93.2
1880	485	440	411	93.3
1881	484	430	403	93.7
1882	460	426	403	94.6

Attendance at the Grammar Schools, 1878 to 1882.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1878	3,845	3,282	3,049	92.9
1879	3,862	3,352	3,117	92.9
1880	3,931	3,439	3,205	93.1
1881	4,039	3,572	3,309	92.6
1882	4,147	3,627	3,360	92.6

Attendance at the Primary Schools, 1878 to 1882.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1878	4,193	3,280	2,966	90.4
1879	4,118	3,140	2,835	90.2
1880	4,110	3,287	2,990	91.0
1881	4,369	3,418	3,033	88.7
1882	4,775	3,834	3,456	90.1

Number of Pupils Admitted to, and Graduated from the High and Grammar Schools, 1878 to 1882.

Year.	Admitted to High School.	Graduated from High School.	Admitted to Grammar Schools.	Graduated from Grammar Schools.
1878	189	82	779	266
1879	152	64	817	204
1880	155	51	864	230
1881	150	87	771	238
1882	145	67	815	226

Number of Pupils belonging to the Evening Drawing Schools, with the Average Attendance, 1878 to 1882.

1878.	1879.	1880.	1881.	1882.
133	139	150	159	153
57	56	71	67	66

Number of Pupils over Fifteen Years of Age, belonging to the Day Schools on the first of May, 1878 to 1882.

1878.	1879.	1880.	1881.	1882.
607	614	603	507	523

Number of Pupils in the twenty Private Schools in Cambridge, 1878 to 1882.

1878.	1879.	1880.	1881.	1882.
1,381	1,610	1,748	1,743	1,752

Table Showing the Number in Each Course in the High School, December, 1882.

Year.	Classical Course.	Complete English.	Shorter English.	Number of Divisions.
Fifth	16	..	..	1
Fourth	29	44	..	3
Third	21	59	..	4
Second	88		14	5
First	98		43	6

For the first two years the Classical and English Courses are identical.

Table Showing the Number in Each Class in the High School, December, 1882.

Year.	Boys.	Girls.	Total.	Per cent.
Fifth	11	5	16	.038
Fourth	24	49	73	.178
Third	29	51	80	.194
Second	40	62	102	.247
First	70	71	141	.342
Total	174	238	412	

Table Showing the Number in Each Class in the Grammar Schools, December, 1882.

Class.	Boys.	Girls.	Total.	Per cent.
First	116	159	275	.069
Second	205	261	466	.117
Third	326	330	656	.165
Fourth	362	392	754	.189
Fifth	407	415	822	.206
Sixth	508	501	1,009	.253
Total	1,924	2,058	3,982	

Table Showing the Number in Each Class in the Primary Schools, December, 1881.

Class.	Boys.	Girls.	Total.	Per cent.
First	538	547	1,085	.257
Second	617	590	1,207	.285
Third	975	956	1,931	.457
Total	2,130	2,093	4,223	

The statutes require that "the School Committee shall annually, in the month of May, ascertain, or cause to be ascertained, the names and ages of all persons belonging to their respective towns and cities on the first day of May, between the ages of five and fifteen years, and make a record thereof."

The following is a summary of the returns for 1882, made by the officers appointed to ascertain the required facts: —

Number of children in the city five years old or more, but less than fifteen 10,370
Number in Public Schools five years old or more, but less than fifteen 7,684
Number in Private Schools five years old or more, but less than fifteen 1,522

Number not attending school five years old or more, but less than eight	613
Number not attending school eight years old or more, but less than fourteen	303
Number not attending school fourteen years old or more, but less than fifteen	248
Whole number not attending school five years old or more, but less than fifteen	1,164
Number in the city eight years old or more, but less than fourteen	6,483

VI. — Finances.

Cost of instruction in Day Schools	$137,328 55
Text-books and stationery for Day Schools	3,538 41
Incidental expenses for Day Schools	1,534 28
Cost of Evening Drawing Schools	700 00
Care and repairs of school-houses	23,829 28
Amount expended for school-house in Ward Four	11,466 43
Amount expended for new furniture	613 30
Total expenditures for all school purposes	$179,010 25
Deducting receipts from the Hopkins Fund ($783.96) and for tuition of non-resident pupils ($226.75), actual cost of the schools to the city	$177,999 54
Assessed value of real and personal estate, May, 1882	50,575,130 00
Ratio of expenses for school purposes to the valuation of 1882	.0035

Cost of Instruction in the Day Schools, 1875 to 1882.

[The cost is made up of the salaries of the teachers, superintendent, and truant officers.]

Year.	Whole Cost.	Average No. of Pupils.	Cost per Pupil.
1875	$165,024 25	7,167	$23 02
1876	164,818 00	7,066	23 32
1877	151,946 65	7,139	21 28
1878	136,491 20	7,028	19 42
1879	132,570 49	6,957	19 05
1880	130,371 75	7,175	18 17
1881	132,501 10	7,434	17 82
1882	137,328 55	7,898	17 38

Cost of the Day Schools, 1875 to 1882.

[The expenditures for new school-houses and alterations are not included.]

Year.	Whole Cost.	Average No. of Pupils.	Cost per Pupil.
1875	$212,960 72	7,167	$29 71
1876	200,894 09	7,066	28 43
1877	180,974 36	7,139	25 35
1878	162,437 77	7,028	23 11
1879	158,196 21	6,957	22 73
1880	153,967 56	7,175	21 45
1881	158,282 84	7,434	21 29
1882	166,230 52	7,898	21 04

Remarks on the Statistics.

By the arrangement of the statistics this year, comparison can be made between them and those of several preceding years. Statistics become increasingly valuable when thus arranged. Not only are the single facts made known, but by inspection other information can be obtained. The following facts among others can be gathered from the preceding tables: —

There has been an increase during the past year of 472 in the average daily attendance of pupils belonging to the day schools, while in five years the increase has been only 774. As there has been no falling off in the attendance at the private schools, this indicates that people are again moving into Cambridge from other cities and towns.

The average attendance for five years, with the exception of one year, has varied but eight tenths of one per cent. The attendance at the High School is better than at the grammar schools, and at the grammar schools better than at the primary schools.

The following additional facts, relating to attendance at the High School, taken from a report of the High School Committee, are of special interest: —

"It has been stated that very few who enter the High School

remain to graduate. On examining the records we find that the number that entered from 1870 to 1878 inclusive was 1,352; the number that graduated from 1874 to 1882 inclusive was 569, over 42 per cent, or nearly half of the number admitted four years before. Of this number 149 (111 boys, 38 girls) were in the five years' (classical) course; 318 (52 boys, 226 girls) in the four years'; 95 (33 boys, 62 girls) in the three years'; * and 7 (6 boys, 1 girl) in the two years'.

"It is also often asserted that the High School is the school of the rich, and ought not to be supported by taxes wrung from the poor; for the rich can afford to pay for the instruction of their children, and the poor do not as a rule send their children to the High School. A careful investigation shows that of the parents of 67 who graduated last July, 11 pay taxes on $10,000 or more, while 28 pay no taxes, or only a poll-tax."

The cost of instruction, which is made up of the salaries of the teachers, superintendent, and truant officers, has increased for two years, but during the same time the cost per pupil has decreased, it being now nearly eighty cents less than two years ago, and nearly six dollars less than in 1876, a reduction in seven years of more than twenty-five per cent.

There has also been an increase for two years in the whole cost of the schools, the expenditures for new school-houses and alterations not being included. But not only for the two years, but for the past eight years, there has been a constant decrease in the whole cost for each pupil, the decrease being over eight dollars, or nearly thirty per cent.

School Accommodations.

The new school-house in Ward Four, now known as the Tarbell Primary School-house, was completed in August, and all the rooms were occupied at the beginning of the autumn term. The building is of wood, two stories high, exclusive of the basement. Its length is 66½ feet, and its width 44 feet. Each story contains two school-rooms, 27½ by 31, two dressing-rooms, 5 by 20, and a hall or entry of ample dimensions. In the upper

* This course is now given up.

story there are also two small class-rooms, about 9 by 10. The plan of the house is such that two or four rooms can be added, and only slight changes be required in the original building. The house with new furniture cost, in round numbers, $12,000. This does not include the value of the land (19,500 square feet), which was owned by the city, and thought to be worth about $4,000.

Two school-houses have been built within the past two years, but the increase in the number of pupils has more than kept pace with the increase in school accommodations. In Ward Three, where the first of the two school-houses was built, there is now a class of sixty scholars in a room not intended for school purposes, having no yard and no suitable accommodations for little children. To meet the wants of this part of the city, I recommend that the third story of the Gore School-house be finished, and that the lower classes of the Putnam Grammar School be removed to that building and placed under the charge of a male teacher, to be appointed sub-master of the Putnam School.

In Ward Four all the rooms in the new school-house are occupied, as I have already said, and there is not a vacant school-room in the ward. In Ward One, in one of the primary schools, four teachers are at work in two rooms, and it was with great difficulty that the grammar school was organized in September on account of numbers.

In my last report I wrote as follows: "The next new school-house, unless it be a small one for the little children in the vicinity of Lake View Avenue, should be for a grammar school, and be located not far from the present school-house on Putnam Avenue."

Since writing this, a school has been opened near Lake View Avenue, in a house rented by the city. The rooms, however, are not adapted to school purposes, and the number of children attending this school will hardly justify the erection of a building for them alone. The opening of this school has led me to consider again the whole subject of school accommodations for Wards One and Four; and after careful inquiry as to the number of children in different parts of these wards, I am satisfied that with two new primary-school buildings, to be used for a

while both for primary and grammar school classes, the erection of a grammar school-house on Putnam Avenue can be postponed for a few years. This seems desirable, for the cost of two primary school-houses would be only about thirty thousand dollars, while the cost of a building for a grammar school would be nearly sixty thousand.

The new school-house for Ward One should be located on or near Lowell Street. This will bring a school sufficiently near to the children in the vicinity of Lake View Avenue, and also to those living on or near Foster Street, who now go to the schools near Harvard Square. In Ward Four, I would locate the new building somewhere in the vicinity of the corner of Putnam Avenue and Pearl Street. One hundred or more of the scholars now attending the Willard School could as conveniently attend school in this locality, and the rooms now occupied by them could be used for grammar-school classes. Eventually the Willard School-house might be taken for a grammar school, and the little children be provided with smaller houses nearer their homes.

No School on Saturdays.

The facts relating to the change by which Saturday became a holiday, although generally known in Cambridge, may be of interest to those connected with schools in other cities. At the meeting of the School Committee in November, 1881, it was ordered: "That from the first Monday of December till the end of the winter term, the schools be kept on Wednesday afternoons, and be not kept on Saturday forenoons, and that the Superintendent, at the end of the time named, ascertain the wishes of the parents and teachers in relation to the continuance of this arrangement."

January 5, 1882, a petition, signed by twenty-nine parents, was presented to the Committee asking "that the old arrangement to keep Wednesday afternoon as a holiday be again instituted." At a subsequent meeting this petition was referred to the Superintendent of Schools. Jan. 25, the Superintendent reported as follows: 1st. A recommendation that the order adopted November, 1881, be rescinded; 2d. An order that from the beginning of the spring term till the first of October,

the experiment be again tried, and that the Superintendent report, at the regular meeting in September, the wishes of parents and teachers in relation to the continuance of the arrangement.

The first recommendation was made because it was found that many parents had arranged, before the action of the Committee, to have their children receive instruction in music, dancing, or painting, on Wednesday afternoons; the second, because it was believed that, all things considered, the advantages were in favor of keeping school Wednesday afternoon, and of making Saturday a holiday.

On the 13th of September, the following question was sent in printed form to every family having children in school, also to the teachers: "Do you prefer the present arrangement by which there is no school on Saturdays?" The question was to be answered by writing *yes* or *no*.

The result was as follows: 2,778 parents wrote *yes*, 1,425 wrote *no*. Of the teachers, 113 wrote *yes*, and 64 wrote *no*. It will be seen that nearly two thirds, both of the parents and of the teachers, expressed a preference for the arrangement by which there is no school on Saturdays.

By making a whole holiday of Saturday, our teachers are able to attend many of the lectures on educational subjects now given in Boston on that day. Many of them improve these opportunities. More than fifty are in attendance upon the lectures of Prof. W. H. Niles on Physical Geography, and an equal number will attend those of Dr. H. P. Bowditch on Physiology. These lectures are provided by the Boston Society of Natural History, and are free to all teachers of Public Schools in or near Boston.

Attendance Required.

I am occasionally asked whether there is any law to compel children to attend school if their parents do not choose to send them.

Section 1, chapter 47, of the Public Statutes reads as follows:

"Every person having under his control a child between the ages of eight and fourteen years, shall annually cause such child to attend for at least twenty weeks some public day school in the city or town in which he resides, which time shall be divided, so far as the arrangement of school

terms will allow, into two terms each of ten consecutive weeks; and for every neglect of such duty the person offending shall forfeit to the use of the public schools of such city or town a sum not exceeding twenty dollars; but if the person so neglecting was not able, by reason of poverty, to send such child to school, or if such child has attended for a like period of time a private day school approved by the school committee of such city or town or is regularly attending a public or private day school known as a half-time school, also approved by them, or if such child has been otherwise furnished for a like period of time with the means of education, or has already acquired the branches of learning taught in the public schools, or if his physical or mental condition is such as to render such attendance inexpedient or impracticable, such penalty shall not be incurred."

It is clearly the purpose of this statute to give every child an opportunity, under favorable circumstances, to get an education. Parents are not at liberty to deprive their children between the ages of eight and fourteen years of the privileges of school for twenty weeks every year, except under circumstances which make attendance unnecessary or inexpedient.

Industrial Instruction.

I do not propose to discuss this question, but I fully believe that at no distant day manual training will be an organic part of our school work. The experiment has already been tried in one of the Boston grammar schools with complete success. The master, in his report to the School Committee, says: "The school went on with unbroken and successful regularity. The teacher was promptly on hand, the order was good, the pupils interested. It was delightful to see the eager desire manifested everywhere in the room to do the day's work well."

In speaking of its effect upon the regular work of the school, he writes as follows: "I consider that the results go far to prove that manual training is so great a relief from the iteration of school work that it is a positive benefit rather than a detriment to the course in the other studies."

This testimony should have great influence. It comes from a man who carefully weighs his words, and who knows whereof he speaks.

I would like to see the experiment tried in Cambridge in connection with our City School. This school is composed almost wholly of boys, many of whom are sent there for truancy. Out

of school these boys are still under the oversight of some person, and are restricted in their freedom to the play-room and the play-ground. During the long days of the year time must hang heavily on their hands. How changed would these hours of recreation be, were these boys to become interested in the use of the plane, the saw, and the hammer! And it is more than possible that the change would reach beyond the months of their connection with this school. There is a fascination to a boy in the use of tools, and the knowledge of their use may be of great service to him in after years. It may save him from a life of indolence, and be the means by which he will earn an honest livelihood.

The Committee, however, is not authorized to provide instruction in manual training until the City Council makes an appropriation for that purpose. The statute is as follows: —

"A town may establish and maintain one or more industrial schools, which shall be under the superintendence of the school committee, who shall employ the teachers, prescribe the arts, trades, and occupations to be taught therein, and have the general control and management thereof; but they shall not expend for any such school an amount exceeding the appropriation specifically made therefor, and shall not compel any scholar to study any trade, art, or occupation without the consent of his parent or guardian; and attendance upon such school shall not take the place of the attendance upon public schools required by law."

Books for Reading or Reference.

At the meeting of the Board in November, an order was adopted instructing me to prepare and print a list of such books as in my opinion are desirable or proper for general reading by the pupils of the public schools; also of such books as may be especially useful for reading or reference in connection with their studies.

In 1876 I prepared, with the aid of the teachers, a short list of books having in view the same object. In carrying out the wishes of the Committee I have thought it best to revise that list, and to extend it by adding books recommended by teachers and by others interested in providing good reading for the young.

The list of books for general reading can be found in the appendix to this report. That of books for reference has not yet been completed.

Evening Drawing School.

By reference to the statistics of the Drawing School it will be seen that the average attendance from year to year is less than fifty per cent of the number registered. In the school for mechanical drawing last year thirty-six pupils were present less than ten evenings, and in that for free-hand drawing forty-two. Even if these pupils belonged to the school only a part of the term, and were regular in attendance while they were members, the time was not sufficient for them to attain results of much value.

There are more applicants every year at the opening of the school than can be accommodated. At the same time, judging from the past, we have ample provision for all who will avail themselves to the full extent of the privileges of the school; and some plan should be adopted which will enable them to enter upon their work at the beginning of the term without delay, and to continue it without interruption.

I would suggest that hereafter admission to the school be by tickets, and that the tickets be given to applicants as follows: First, to former members whose attendance was at least sixty per cent of the whole number of evenings of their connection with the school; second, to new applicants who pledge themselves to be present three evenings out of every five; third, to such others as may be admitted without detriment to the school.

Cambridge School Reports, — 1841 to 1860.

During the year I have re-read these reports with great interest and profit. Not only do they contain information about the schools of Cambridge, but I have found them rich in the discussion of educational subjects. Selections from these reports might be compiled into a volume of great value. One subject, however, has received more attention than any other. It is the one which thoughtful persons to-day believe to be of vital importance to the interests of the schools and the State. I refer to that of *moral training*.

The more recent reports of the Committee are within reach of those who desire to read them, but the earlier reports cannot easily be obtained. Even the School Department has not a

complete set in its possession. I have, therefore, thought it best, especially as the condition of the schools has been so fully presented in the report of the Committee, to confine my report this year almost entirely to statistical information, and use the remaining pages assigned to me to start again on their work of doing good some of the earnest words which I have found in these reports, — words written by men who took a deep interest in the cause of education, and who gave freely of their time and thought to the welfare of the public schools of Cambridge.

These selections are from the first twenty printed reports of the School Committee, and are confined to the one subject of

Moral Training.

"We would urge the importance of more attention, in all our schools, to good manners and morals, the principles of piety, and the principles on which good free institutions are based and sustained. While we never could allow sectarian influences to be exercised, or the politics of party to be inculcated, we do feel that great truths, everywhere acknowledged by the wise and good in this free land, should be incorporated into the education of free citizens and immortal minds."

"It is hoped that the teachers will continue to receive the countenance of all good men in their endeavors to banish lying, obscenity, profaneness, and every other vice and impropriety from the schools, and to inculcate purity, kindness, reverence, and the love of God."

"We think that more pains should be taken to cultivate *reverence*. Within the memory of many who are yet young all the children were taught to say, 'Yes, sir,' and 'No, sir,' to take off their hats when a stranger, or any respectable citizen went past; and, above all, 'to rise up before the hoary head, and honor the face of the old man.' In losing the manners of our old-school gentlemen, are we in no danger of losing those qualities of character which have given our venerated Commonwealth, in respect to order, courteousness, and solid worth, a highly enviable position among the States of our Union? We do not look for a restoration of all the customs of former times, but we think that care should be taken to observe that law of the State which requires the inculcation in our schools of 'all those virtues which are the ornament of human society, and the basis upon which a republican institution is founded.'

"Among these virtues, the statutes enumerate 'the principles of piety.' The peculiarities of any denomination cannot, of course, be tolerated in the schools. But there is a broad platform laid down by the Commonwealth on which all Christians can meet.

"Aside from other considerations, it is universally conceded that morality is indispensable to the welfare, if not to the very existence, of a republic. Patriotism, therefore, demands the inculcation of the virtues,

especially justice, integrity, and benevolence. But, in the words of our own great Washington, 'Let us with caution indulge the supposition that morality can be maintained without religion. Whatever may be conceded to the influence of refined education upon minds of a peculiar structure, reason and experience both forbid us to expect that national morality can prevail in exclusion of religious principle.'"

"Let our teachers seek to elevate, purify, and ennoble the characters of the children, by inculcating those principles of Christian morality and piety in which all are agreed, and which the Constitution of the Commonwealth requires to be taught; to inspire their pupils by example and precept with a high sense of honor, with a strict regard to justice, purity, honesty, and truth, with a disposition to aspire after excellence, and with all those good affections which are connected with love to God and love to man. Our teachers are sculptors, whose business it is, not to chisel out beautiful forms of stone for the admiration of posterity, but to unfold and fashion immortal minds, to make good children, good brothers and sisters, good men and women, good and useful citizens, to assist in laying the foundations of character for 'the life that now is, and that which is to come.'"

"Though our teachers were doing all that we desire, to give the most thorough instruction in the several branches now prescribed, — in the languages, in grammar, history, geography, mathematics, and the natural sciences, — still, if this were all, they would come far short of accomplishing the highest purpose of education, which is the cultivation, not of the intellectual powers, but of the moral and religious capacities and affections. Without the cultivation of this part of the child's nature, which is its peculiar and pre-eminent endowment, the development of its intellect merely may be not only useless, but worse than useless, and fraught with danger to society.

"Considering the moral dangers that are thickening around our youth, the total want of all moral and religious instruction for many at home, the exposure of others from day to day to the most corrupting examples, the low tone of public sentiment in respect to the obligations of truth and justice, the supreme regard that is paid to self-interest, and the alarming disregard that is apparent for those legal oaths on which all security under law depends, the thousand agencies at work to corrupt the public morals, the licentious publications of the day designed to lure the young to ruin, and so cheap and common as to be insinuated everywhere, the tide of immigration pouring in upon our land, bringing with it the ignorance and vice of older countries, and, lastly, the fearful increase of crime, especially of juvenile depravity, as attested by the records of our criminal courts, — it is time that the community were awakened to the public peril, and, if there be any jealousy of sectarian influence which would exclude moral and religious instruction from the schools, that it should be cast away at once and forever."

"The object of the law of our State, requiring schools to be public nurseries of virtue, is undoubtedly that they may train up good citizens.

But he only can be a good citizen who is a good man; and all observation and experience unite in teaching that there is no probability, according to the usual and natural course of things, that he will be a good man who has not previously been made a good child."

"It is sometimes said that there is little, if any, moral and religious instruction in our schools. This is expressed too strongly, and shows a want of discrimination. All the admonitions administered to the children and youth for waste of time, for deception and falsehood, for vulgarity and profaneness, for cruelty, and the indulgence of every evil passion, and for disrespect and disobedience to parents and teachers, constitute so far moral and religious instruction. Such instruction cannot be of a merely negative kind. It cannot fail to bring into prominent view the opposite virtues of industry, of truthfulness, of purity of thought and language, of humanity, of control over evil passions, and of obedience to parents and teachers."

"The Committee have been unceasing in their endeavors to show that the proper business of education is to train up immortal beings, not only to do the practical business to which circumstances, inclination, or taste may call them, but to fulfil the duties of citizens in a community of equals, under a sense of responsibility to the country and to God; that, while the work of trade and profession must be faithfully performed, there is a moral nature and an intellectual power above and beyond trades and professions, the exaltation of which is the true end of education, as well as of the whole discipline of man's life on earth. The *man* is above the mechanic, the merchant, or the lawyer."

"The Committee have not failed to observe the judicious earnestness with which many of our teachers have attempted a good moral influence over their pupils. Decided commendation is due to those who have directed their attention to the moral wants of our children, and have used their best endeavors to secure to them a knowledge of the principles and precepts of Christianity in their application to the relations and duties of the school-room; of their influence in the formation of character; of their authority over all persons; and of their claim to control the conduct in every relation, and to influence the life at all times and in all places."

"We doubt not that our schools are under good moral influences; that those who preside over them permit no indelicate action, discourage a tell-tale spirit, repress personal rivalries, soothe, as far as possible, the excitable temper, and encourage the depressed spirit. The teacher's own character must be brought to bear as much as possible on the pupils', his reverence should inspire theirs, his patience sustain, his sympathy cheer, his hope kindle, his respect lead them to respect themselves. The labor should not be so much to give his own views of duty as to awaken theirs, not so much to present morality as an outward obligation, as to elevate the individual conscience into its rightful pre-eminence as the guide of life, the throne of power, the crown of glory, the altar of God! Let our

teachers remember what Prof. Huntington has so eloquently said of the teacher's unconscious moral influence over his charge; let them give the heart as well as the head to their high calling, let them determine that intellectual distinction shall not be set above moral excellence, let them be deeply impressed by the responsibility they cannot evade, and quickened by the promise made to every spiritual worker; and higher results than we now venture to hope will be realized in that peace which is permanent, in that blessedness which can never pass away."

By the rules of the Committee our teachers are required to give instruction in morals in conformity with the provisions of the Public Statutes. I am glad to bear testimony to the fact that many of them are giving much thoughtful attention to this part of their work. It is too often true that children hear at home careless or unkind remarks in reference to their teachers which prejudice their minds to such an extent as to render unavailing all effort at school in their behalf. Let me therefore bespeak for teachers the hearty co-operation of parents. Not for the teacher's sake do I ask it, but for the sake of the child.

FRANCIS COGSWELL,
Superintendent of Public Schools.

STATUE OF JOHN BRIDGE, THE PURITAN.

INTRODUCTORY.

In the "Genealogical Register," which forms the supplement to Paige's "History of Cambridge," is the following: —

"Bridge, John was among the earliest inhab. of Camb. and owned land here in 1632. He resided in 1635 at the N. E. corner of Dunster and South Streets, and soon afterwards owned a house at the N. W. corner of Holyoke and Winthrop Streets. About 1638 he purchased a house near the spot where the Washington Head Quarters now stand, with twelve acres of land, and resided there. He was early elected Deacon of the church; was Selectman twelve years, between 1635 and 1652; Representative four years, from 1637 to 1641; and was frequently employed in the settlement of estates and in determining the boundaries of towns. He m. Elizabeth Saunders 1658, (marriage contract dated 29, Nov. 1658,) who had previously been the wife of Roger Bancroft of Camb. and Martin Saunders of Braintree. He d. about 1665, leaving wife, son Matthew and granddaughter Dorcas, dau. of S. Thomas, deceased. His wife Elizabeth subsequently m. Edward Taylor of Boston and was living in 1685."

The subject of the foregoing notice had one son, Matthew, who survived his father, dying April 28, 1700, when upwards of 80 years old. The remains of father and son were deposited in the burial-ground in Harvard Square. Memorial stones were placed over their graves and over that of a descendant, Levi Bridge (hereinafter mentioned as the founder of the Bridge Charitable Fund in this city), July 4, 1876, by Samuel J. Bridge, the donor of the statue of the first of the name.

Shortly after the city of Cambridge was the recipient of a donation from another member of the family, the late Mr. Levi Bridge, who, by a deed of trust, dated Aug. 12, 1875, gave the sum of $773.95, which had been deposited in the Cambridgeport Savings Bank in the name of the late Hon. John Sargent as trustee. It was stipulated in the deed that, after the death of

Mr. Bridge, this sum was to be transferred to the city of Cambridge, and a statement of the facts relating to the gift was made by the trustee in a communication to the City Council, dated Sept. 6, 1876, the donor having deceased.

By the provisions of the deed of trust, the money thus given was to form the nucleus of a fund to be known as the "Bridge Charitable Fund," to be forever held by the city upon this further trust, to add the interest of said fund to the principal, until such time as said fund, by the accruing interest, or by gifts from other philanthropic persons, shall amount to two thousand dollars, after which time one third part of the interest of said fund shall be added to the principal annually forever, and the remaining two thirds of such interest shall be paid over annually to the overseers of the poor for the time being, to be by them expended for the deserving poor of the city of Cambridge, in such manner as they shall deem best."

The donation of Mr. Bridge was formally accepted by the City Council, Sept. 27, 1876, and an ordinance was subsequently adopted creating a board of commissioners of the fund thus established. The bank-book was delivered to the commissioners by Mr. Sargent, Jan. 24, 1877, the sum on deposit then amounting to $891.83. In the month of October following, this sum was doubled by the gift of Mr. Samuel J. Bridge, who was a distant relative of the original donor, thus making the total amount given to the fund $1,783.66. In the letter from Mr. S. J. Bridge, dated Oct. 15, 1877, covering the gift made by him, he said, referring to the original donation by his kinsman: "It was his wish, and it is mine, that beyond a proper record, there may be no unnecessary publicity in the annual distribution of the fund, nothing that would have a tendency to wound the pride of the recipient." In this communication, allusion is made to the graves of his ancestors, John and Matthew Bridge, and of his kinsman Levi, over which he had caused the erection of memorial stones, and the hope is expressed that the city "will always have a fostering care over them."

Samuel James Bridge, who will hereafter be especially remembered in this community as the generous donor to the city of Cambridge of the statue of the first of his name in this

country, is a native of the State of Maine, where many of the descendants of John Bridge still reside. He removed to Boston many years ago, and in the year 1841 was appointed by President Harrison as an appraiser in the Boston Custom House, where he remained until 1856, when he was appointed appraiser-general of the Pacific Coast. His unwavering fidelity to the trust reposed in him by the Treasury Department while appraiser for the port of Boston, is well remembered by the older merchants of that city. Mr. Bridge had the confidence of every administration of the national government from the time of his appointment in 1841 to the close of the administration of President Grant. He was the commissioner having charge of the erection of the Custom House at San Francisco, costing $5,000,000; and also of the United States Mint and Marine Hospital in the same city. In his later years he has travelled much, visiting every quarter of the globe, and by his rare powers of observation has made himself familiar with the characteristics, institutions, and population of nearly every country in the world.

The commission to execute a bronze statue of John Bridge, the Puritan, was given by Mr. S. J. Bridge to the eminent sculptor, the late Thomas R. Gould, of Boston, in the autumn of 1881. He designed and modelled a statuette, which was satisfactory to Mr. Bridge, and subsequently carried it with him to Florence, where he arrived on the first of November. Preparations for the clay model of the "Puritan" were soon after begun, and about the 23d of November the artist personally worked upon the statue for the first and last time, also giving suggestions in regard to certain changes desired. Mr. Gould died on the 26th of November, 1881, and the completion of the figure devolved upon his son and co-worker, Marshall S. Gould, who devoted his entire time and energy to the execution of his father's conception of the "Puritan." In advancing and completing the work, he made such changes from the small model as had been previously suggested to him by his father, together with such alterations as every artist finds necessary in making a colossal statue from a diminutive study. The names of T. R. and M. S. Gould are thus properly connected in the production of the finished work,— the one as the original designer of the

statue, the other as the skilled and appreciative co-worker, than whom none could have more fully realized the father's conception of the character to be produced in monumental bronze.

It has been said that this generous and artistic gift is believed to be the first statue of a Puritan pioneer that has been erected in New England. Through the pious forethought of the donor, it is also the first sculptured representation of one of its early settlers that has been set up in the city of Cambridge.

The stormy periods of our early history have heretofore been commemorated by us from time to time, and such localities as have been rendered historical through their association with leading men and events of the past have been marked by memorial tablets placed at different points in our city. To Samuel James Bridge, now for the second time the city's benefactor, must be accorded the merit of having brought to our view the lineaments and figure of the Puritan himself, as idealized in the artist's mind.

CITY OF CAMBRIDGE.

Statue of John Bridge, the Puritan.

At a meeting of the Mayor and Aldermen, Sept. 20, 1882, a communication was presented by his Honor the Mayor, from Samuel James Bridge, Esq., of Boston, offering to the city a bronze statue of his ancestor John Bridge, one of the first settlers of the town, and an active and useful man.

The kind offer thus made was met with an appreciative spirit by the City Council, as appears by the following order, which was adopted in concurrence: —

City of Cambridge,
In Board of Aldermen, Sept. 20, 1882.

Ordered, That the statue offered to the city by Samuel James Bridge be accepted, and that the thanks of the City Council be given to Mr. Bridge for his generous offer.

Also that a joint special committee, to consist of his Honor the Mayor, and Aldermen Read, Corcoran, and Fairbanks, with such as the Common Council may join, be appointed to take such action as may be proper in

relation to the reception of the statue and the selection of a location for the same.

Sent down for concurrence.

Attest: JUSTIN A. JACOBS, *City Clerk.*

IN COMMON COUNCIL, Sept. 20, 1882.

Concurred. The President, with Councilmen Bent, Pear, Russell, Doyle, and Thorogood, are joined on the part of this board.

Attest: J. WARREN COTTON, *Clerk.*

Approved, Sept. 21, 1882.

JAMES A. FOX, *Mayor.*

The Joint Special Committee thus appointed was composed as follows: —

His Honor JAMES A. FOX, *Mayor.*
Alderman JOHN READ.
Alderman MICHAEL CORCORAN.
Alderman JOHN W. FAIRBANKS.
President GEORGE H. HOWARD.
Councilman GEORGE C. BENT.
Councilman ISAAC S. PEAR.
Councilman WILLIAM E. RUSSELL.
Councilman JAMES E. DOYLE.
Councilman JOHN G. THOROGOOD.

The commitee immediately proceeded to the duty assigned to it, receiving assistance in the suggestions of William S. Barbour, Esq., city engineer, and Marshall S. Gould, Esq., the sculptor. After visiting several localities in the vicinity of the former abode of John Bridge, the committee finally selected a spot deemed suitable as a site for the statue upon Cambridge Common. There was a slight delay, owing to the non-arrival of the statue from France, where it was cast, and on account of the illness of the donor, with whom the committee wished to consult in reference to the location to be selected, and whose views it was desired to meet in the fullest manner.

The general superintendence of the work of locating the statue was committed to Mr. Barbour, city engineer; the labor of putting in the necessary foundation, placing the pedestal thereon, and setting up the statue, being performed by Mr. Alexander McDonald, of this city. The granite base was firmly set, and

the statue placed in position under the immediate supervision of the sculptor, and the work was completed on Saturday, Nov. 25th, after which it was covered to await the inauguration ceremonies. The statue is located in that part of Cambridge Common, near the junction of North Avenue and Waterhouse Street, and faces in a nearly southerly direction, looking towards the College grounds. The figure is about nine feet in height, and that of the pedestal about the same, the entire structure being about eighteen feet from the foundation.

The day of the formal acceptance and unveiling of the "Puritan" was fixed for Tuesday, Nov. 28th, at 3 o'clock, P. M. It was intended by the committee that the ceremonies should take place around the base of the statue, but a fall of snow and subsequent cold weather intervening, it was decided to ask that Shepard Memorial Church, on Garden Street, opposite the Common, be opened for the purpose. The attention of the public had been called to the occasion, through the various local newspapers, all being invited, while special invitations were also sent to a large number of prominent citizens and others. A special form of invitation was also sent by the donor to the descendants of John Bridge, numbering as far as known one hundred and thirteen in all, including one infant seven months old, of the ninth generation from his ancestor.

CITY OF CAMBRIDGE.

This city invites you to be present at Cambridge Common, on Tuesday, November 28th, at 3 P. M., at the ceremonies attending the acceptance of a statue of

JOHN BRIDGE,

one of the founders of the town, presented to the city by Samuel James Bridge, a descendant in the sixth generation.

For the Committee of Arrangements,

JAMES A. FOX, MAYOR.

Cambridge, Nov. 20, 1882.

CITY OF CAMBRIDGE.

This city invites the descendants of John Bridge, one of its founders, to be present at Cambridge Common, on Tuesday, Nov. 28th, at 3 P. M., at the ceremonies attending the acceptance of a statue of their ancestor, presented to the city by

SAMUEL JAMES BRIDGE,

a descendant in the sixth generation.

For the Committee of Arrangements,

JAMES A. FOX, MAYOR.

Cambridge, Mass., Nov. 20, 1882.

The invitations to descendants of John Bridge were sent to the following: —

NAMES.	RESIDENCES.
Samuel James Bridge	*San Francisco, Cal.*
Mr. and Mrs. Nathan William Bridge	*West Medford, Mass.*
Jane P. Bridge	*Somerville, Mass.*
Edmund Bridge	*West Medford, Mass.*
Frederick William Bridge	*West Medford, Mass.*
Mr. and Mrs. James Bridge	*Augusta, Me.*
Susan Williams Bridge	*Augusta, Me.*
Margaret North Bridge	*Augusta, Me.*
Sarah Cony Bridge	*Augusta, Me.*
Ruel Williams Bridge	*Augusta, Me.*
James Bridge, Jr.	*Atlanta, Ga.*
Horatio Bridge	*New York City.*
Joseph Hartwell Bridge	*Leadville, Colorado.*
Hannah North Bridge	*Geneva, N. Y.*
Anna Frazier Bridge	*Geneva, N. Y.*
Mr. and Mrs. William Bridge	*West Medford, Mass.*
Henry Saunders Bridge	*West Medford, Mass.*
Edward W. Bridge	*West Medford, Mass.*
Helen W. Ritchie	*Philadelphia, Pa.*
Lucy Perkins Bridge	*West Medford, Mass.*
Eliza Putnam Stone	*Boston, Mass.*
Mary Bridge Vose	*Colorado.*
Hannah North Vose	*Colorado.*
Chandler Vose	*Colorado.*
George Howe Vose	*California.*

NAMES.	RESIDENCES.
Hannah Bridge Williams	*Augusta, Me.*
Abby Williams Marble	*New York City.*
Horatio Bridge	*Washington, D. C.*
Charlotte Marshall Bridge	*Washington, D. C.*
Margaret North	*New York City.*
Hannah E. North	*New York City.*
George Weston	*New York City.*
Mary Austin	*New York City.*
William F. Bridge	*Foster's Crossings, Ohio.*
James Crosby Bridge	*Foster's Crossings, Ohio.*
Elizabeth Crosby Bridge	*Exeter, N. H.*
Henry Whitney Bridge	*Cincinnati, Ohio.*
William F. Bridge, Jr.	*Cincinnati, Ohio.*
Herbert Sage Bridge	*Cincinnati, Ohio.*
Catherine May Bridge	*Foster's Crossings, Ohio.*
Walter Guild Bridge.	*Foster's Crossings, Ohio.*
Josiah Bridge	*Cambridge, Mass.*
Mrs. William T. Piper	*Cambridge, Mass.*
Charles Bridge	*Albany, N. Y.*
Charles Francis Bridge	*Albany, N. Y.*
Erastus T. Bridge	*Haverhill, Mass.*
Mrs. Samuel Bridge	*Cambridge, Mass.*
Mr. and Mrs. George O. Davis	*Lexington, Mass.*
Frederic Gardner Davis	*Lexington, Mass.*
Charles Bridge Davis	*Lexington, Mass.*
Harry Wellington Davis	*Lexington, Mass.*
Alice C. Baker	*Cambridge, Mass.*
Mr. and Mrs. George L. Stratton	*Concord, N. H.*
Florence Gardner Stratton	*Concord, N. H.*
George Bridge Stratton	*Concord, N. H.*
Charles Devens	*Boston, Mass.*
Thomas M. Devens	*Charlestown, Mass.*
Martha Lithgow Downes	*Charlestown, Mass.*
Caroline Devens Morris	*Portsmouth, N. H.*
Henry Devens	*Brattleboro, Vt.*
Francis Payson Sherburn	*Charlestown, Mass.*
Edward F. Devens	*Charlestown, Mass.*
Helen Devens Crocker	*Charlestown, Mass.*
Richard Devens	*Washington, D. C.*
Mrs. Arthur L. Devens	*Cambridge, Mass.*
Mary Devens	*Cambridge, Mass.*
Arthur Lithgow Devens	*Cambridge, Mass.*
Agnes Devens	*Cambridge, Mass.*
Frank Payson	*New York City.*
Charles Payson	*Washington, D. C.*
Francis Faithful	*Brighton, England.*
James N. Bowman	*Council Bluffs, Iowa.*

NAMES.	RESIDENCES.
Lizzie Y. Bowman	*Wiscasset, Me.*
M. W. Bridge	*Providence, R. I.*
W. W. Bridge	*Wilbraham, Mass.*
M. Wells Bridge	*Springfield, Mass.*
Benjamin B. Bridge	*East Brookfield, Mass.*
Jesse F. Bridge	*Meriden, Conn.*
Charles A. Bridge	*Boston, Mass.*
C. S. Bridge	*Boston, Mass.*
Mrs. Sarah Knowles Gibson	*Boston, Mass.*
Caroline Knowles	*Boston, Mass.*
Mrs. Rebecca Bridge	*Boston, Mass.*
Mrs. Abel E. Bridge	*Waltham, Mass.*
Theodore E. Bridge	*Boston, Mass.*
Mrs. C. T. Jackson	*Concord, Mass.*
Mr. and Mrs. Frederick Dodge	*Concord, Mass.*
Mr. and Mrs. William Arthur Mayor, U. S. A.	*Governor's Island, N. Y.*
John Jackson	*Boston, Mass.*
Lillie Jackson	*Concord, Mass.*
Charles Jackson	*Concord, Mass.*
Mrs. Stephen Barrett, Jr.	*Ayer Junction, Mass.*
Mathew Bridge	*San Francisco, Cal.*
William D. Bridge	*New Haven, Conn.*
Mrs. William Barber	*San Rafael, Cal.*
Wm. H. Bridge	*Marblehead, Mass.*
Robert Bridge	*Marblehead, Mass*
Edward Bridge	*Marblehead, Mass.*
Mrs. Isabella Freeman	*Sandwich, Mass.*
Bowman B. Johnson	*Dresden, Me.*
Elizabeth W. Gerry	*East Lexington, Mass.*
Charles Downing	*Newburg, N. Y.*
Henry Garfield	*Cleveland, Ohio.*
William Garfield	*Cleveland, Ohio.*
Mr. and Mrs. James McDonald	*Boston, Mass.*
John H. Sherburne	*Boston, Mass.*
Charles Morris	*U. S. Army.*
Caroline L. Hoy	*Washington, D. C.*
Gertrude M. Burnham	*Lowell, Mass.*
Caroline Watson	*Charlestown, Mass.*
John W. Bridge	*Lawrence, Mass.*
John W. Bridge, Jr.	*Lawrence Mass.*
Benjamin Hartwell Bridge	*Lawrence, Mass.*

[Seven months old, in the ninth generation from John Bridge.]

Unveiling of the Statue.

The services connected with the unveiling of the statue of the "Puritan" on Cambridge Common were held, in accordance with

previous arrangement, in Shepard Memorial Church, the members of the city government, invited guests, and citizens generally assembling informally at the hour appointed.

The church was well filled, among the audience there being many distinguished citizens, conspicuous among whom was the venerable donor. There were also numerous other descendants of John Bridge, including Nathan William Bridge, Esq., of West Medford, Mass., and Judge Charles Devens, of the Supreme Court of Massachusetts.

Services.

The opening exercise was the performance of a voluntary on the organ by Edwin L. Gurney, organist of Broadway (Cambridge) Baptist Church, at the conclusion of which Alderman John Read, chairman of the committee of arrangements, made the following announcement: —

Fellow Citizens and Guests: — We are assembled at this time for the acceptance of the statue of John Bridge, the Puritan. I invite the Rev. Dr. Alexander McKenzie to invoke the divine blessing.

Rev. Alexander McKenzie, D. D., of the Shepard Memorial Church, then offered prayer, at the conclusion of which the audience joined in singing the following hymn, accompanied by the organ: —

HYMN BY REV. LEONARD BACON, D. D.

O God, beneath thy guiding hand,
Our exiled fathers crossed the sea;
And when they trod the wintry strand,
With prayer and psalm they worshipped thee.

Thou heard'st well pleased the song, the prayer:
Thy blessing came; and still its power
Shall onward through all ages bear
The memory of that holy hour.

Laws, freedom, truth, and faith in God
Came with those exiles o'er the waves;
And where their pilgrim feet have trod,
The God they trusted guards their graves.

And here thy name, O God of love,
Their children's children shall adore,
Till these eternal hills remove,
And spring adorns the earth no more.

Alderman Read : —

"The statue which will be unveiled immediately after these exercises is the work of the late Thomas R. Gould, completed by his son. It is of one who, having held offices of high trust, was a representative man of the early times. Samuel J. Bridge, a descendant in the sixth generation, has made this gift to the city of Cambridge, and his letter of presentation will now be read by George H. Howard Esq., the President of the Common Council."

President George H. Howard then read the following letter :

BOSTON, Sept. 20, 1882.

To the Honorable JAMES A. FOX,
Mayor of Cambridge:

Sir, — I beg to offer to the city of Cambridge, through you, a bronze statue of my ancestor, John Bridge, one of the first settlers in the town, and a man useful and influential in his day and generation.

The sculptor, the late Mr. T. R. Gould, has tried to figure forth the Puritan pioneer, and upon the pedestal for the statue I have caused to be described the typical services and character which seem to me to make John Bridge worthy of lasting commemoration.

If the City Council accepts this offer, I shall ask leave to set up the statue in one of the public squares of Old Cambridge, the exact site to be determined in whatever way may seem to the Council suitable.

I have the honor to be, Sir, with respect,

Your obedient servant,

SAMUEL JAMES BRIDGE.

Mayor Fox accepted the statue in behalf of the city as follows : —

FELLOW CITIZENS : — From the communication of Mr. Samuel James Bridge, dated Sept. 20th last, to which you have just listened, you are informed that that gentleman — not now for the first time, I may say, a liberal donor to us, and happily present with us to-day — has presented this statue of his sturdy and heroic ancestor to the city of Cambridge, — believed to be the first statue in Puritan garb that has been erected in New England.

With becoming acknowledgment, the generous and artistic gift was promptly accepted by our City Council, and now being set up on our principal public ground not far from the spot of his early home on Dunster Street, we have assembled together formally to accept the finished work.

It gives me great pleasure to be the recipient, in behalf of the corporation and the citizens at large of Cambridge, of this statue of one of the early Puritans and settlers of our ancient and favored town from one his worthy descendants in the sixth generation.

John Bridge must indeed have been "a man useful and influential in his day and generation." Born in 1578 in old Braintree, in Essex County, England, during the reign of Queen Elizabeth of brilliant fame, he came in 1631, at the mature age of fifty-three, and settled here, as the inscription upon the pedestal states. He was our original supervisor of the public school, first townsman or selectman for twenty-three years, representative to the Great and General Court for four years, and was appointed by that body to lay out lands in this town and beyond.

We find his name prominently mentioned in the early records of the town in connection with those of Dunster, Hooker, Shepard, and others.

"Among the reasons," says the Rev. Thomas Shepard, "which swayed me to come to New England, divers people in Old England of my dear friends desired me to come here to live together, and some went before and writ to me of finding a place, one of which was John Bridge."

But I will not go into detail on these points, and thus encroach upon the province of the accomplished gentlemen who are to follow me, and who will illustrate the lives and the times of our Puritan progenitors much more ably than I can do.

It is surely well to "remember the days of old," and the men as well, who, by their sacrifices in any department of human endeavor or toil, have set forward the state of human progress on earth ; and it is particularly fitting to erect statues to perpetuate the forms, the character, and the labors of our Puritan ancestors, that coming generations as they rise may not forget those devoted pioneers of freedom in religious truth and observances who preferred to emigrate to an unknown and inhospitable land, where they might worship God according to the dictates of their own consciences, rather than to wage a long and doubtful conflict with the strongly entrenched ecclesiastical system of England, united as it was to the complete civil power of the kingdom.

The Puritans brought to this land the highest principles of religious and civil liberty ; and if we would witness the ultimate outcome of their principles, we may well say, with the epitaph in St. Paul's Cathedral, London, on the great architect of that church, "Look around you."

This statue has been executed by an American artist of genius and exquisite taste, of whom we have good reason to be proud, the late Thomas R. Gould, a native of Boston, but who long dwelt and wrought in Florence, Italy. His untimely death left the unfinished work to his son, Mr. Marshall S. Gould, who has admirably and successfully completed the original design of his father. The elder artist has impressed his genius upon many portrait statues and busts in this city and vicinity. In yonder library of Harvard University is his fine bust of Ralph Waldo Emerson; the Town Hall of Lexington contains a statue of John Hancock ; while in the Public Library Building of Concord is one of its liberal donor to the town, William Munroe. By commission from the Grand Army of the Republic, he executed the beautiful statue of the noble Andrew which stands in the burial lot of our great war governor at Hingham-by-the-Sea. New York City claims a bust of the elder Booth ; while in the vestibule

of the Boston Herald Building his artistic illustration of steam and electricity may be admired. His portrait statue of King Kamehameha the First, at Honolulu, is a notable one, as well as that ideal conception entitled the "Ascending Spirit," which is appropriately placed on the burial lot in Forest Hill Cemetery where the mortal remains of the talented sculptor now repose.

And now need I repeat, as the representative of the city, that I accept with pride and pleasure this statue of the devoted Puritan and non-conformist, so liberally and handsomely bestowed by Mr. Bridge? and we will ever preserve it amid its pleasant surroundings with especial care, so that it may teach to our children's children to a late generation the courage, the self-denial, the humble yet heroic religious spirit of as brave and honest a body of Christian adventurers as, acting under their own light, have ever existed, who did so much towards setting forward the Redeemer's kingdom upon earth, and who so honestly labored to establish on this western continent what they deemed to be a great good, viz., "A Church without a Bishop, and a State without a King."

After the close of his address, the Mayor said: —

"A descendant of the Puritans has been invited to speak to you to-day. I take pleasure in introducing Col. Thomas W. Higginson."

Col. Higginson then delivered the dedicatory address of the occasion, as follows: —

The man whose name we to-day commemorate represents none of those classes which have hitherto almost monopolized bronze and marble. He was neither general nor statesman, neither poet nor author. No encyclopædia records his name, no history of the nation mentions him. Is it not strange that under these circumstances we should meet to dedicate his statue? On the contrary, it is for this very reason. It is a characteristic of the rising art of America, that, unlike the art of older nations, it celebrates the common man. Yonder silent figure upon our soldiers' monument does not wear the uniform of the brilliant general of cavalry, whose name heads the inscription below, but that of the hundreds of private soldiers whose names follow. It is the same with nearly all of the thousand other soldiers' monuments throughout the land. In the same way, going back to the Revolution, we have French's "Minute-Man" at Concord. Following the same instinctive tendency, going back to the settlement of the country, we have before us not Winthrop, not Endicott, but the private soldier, or at most the non-commissioned officer of the early Cambridge settlement, the typical Puritan, plain John Bridge.

It is the first time, so far as I know, that the every-day Puritan has appeared in sculpture. In the time when the clergy were kings or viceroys, this man was content to be a deacon. In the time when this very Cambridge Common, where we stand, was the scene where governors were elected, John Bridge was satisfied with an office which is

to this day a school of humility, and was member of the "Great and General Court." He was, in the expressive phrase of that day, a "townsman." He stands for the plain people, who founded the little settlement, and built for their defence the great "pallysadoe" and "fosse" which once passed within a rod or two of where the statue stands, and which have left their memorials to this day in the willow-trees of yonder play-ground. John Bridge probably worked in person on those defences; he was one of those who kept back the Indian and brought civilization forward; he stands for the average ancestry of us all. Whatever we now possess we owe, in a general sense, to the fact that our forefathers were even such men as John Bridge.

But, beyond this, we owe a peculiar debt to him individually. It happened to him to be instrumental, in a special way, for preserving the very existence of the little settlement. He came to America in 1631, probably as a member of a company from Braintree, England, which settled first near Mount Wollaston, and then was removed hither by order of the General Court, being soon joined by Rev. Thomas Hooker, who became their pastor. John Bridge came to Cambridge, then Newtown, in 1632; owned land here in that year, and became a freeman March 4, 1635. He lived at that time on the northeast corner of Dunster and South Streets, owning also a house on Holyoke Street soon after. In 1636 came an event which very nearly brought about the extinction of the little settlement. Parson Hooker, moved by the earliest outbreak of what has since been called the Western fever, made up his mind that the village, with its sixty-two houses, was too crowded for him and too near other villages. This was at least the nominal reason why he and the bulk of his congregation resolved to set off through the woods to Connecticut with wife and child, bag and baggage, cows and oxen, there to establish a transplanted Newtown at what is now Hartford. It is very possible that this formidable secession might have been the death of the little town, but for one fact, that John Bridge decided, in his sturdy Puritan spirit, to stay where he was and save the settlement.

The way in which he saved it was this: There was at that time in England a young clergyman named Shepard, not yet thirty years old, but of such repute for piety and eloquence that he has come down to posterity with four resounding epithets forever linked to his name, — "the holy, heavenly, sweet-affecting, and soul-ravishing Mr. Shepard." We know from his own autobiography that he came to America by the urgent request of friends; but the only friend whose name he mentions is John Bridge. He came at the most opportune time, with a company of sixty, and was persuaded to remain temporarily, at least, in Cambridge. He and his party stayed permanently; they took the meeting-house of Mr. Hooker, the dwelling-houses of his parishioners; and when, upon a day in June in 1636, Mr. Hooker and his hundred men, women, and children went with their oxen and cows through the streets into the wilderness, Mr. Shepard and his sixty stood at their newly acquired front-doors and bade them farewell. Exit Hooker; enter Shepard: but John Bridge was

the link between. He was like the French herald whose duty it was to proclaim the king's death and the accession of his successor. "*Le roi est mort, vive le roi.*" It would have been strange indeed if when the new church was organized John Bridge had not become its first deacon. He was, as the facetious Cotton Mather would undoubtedly have said, had he but thought of it, "the *Bridge* that carried us over."

And, as it turned out, by securing Mr. Shepard he secured not the town only but the college. That was placed here partly for the sake of the climate, but more for Mr. Shepard's sake. It was because of him, Cotton Mather tells us, that this, "rather than any other place, was pitched upon to be the site of that happy seminary." There was thus a regular chain of circumstances. It was because of Deacon Bridge that Mr. Shepard came; because of Mr. Shepard that the college came; because of the college that the name came, taken from the English university town. Whether John Bridge was or was not identical with the "Mr. Bridges" who gave the infant college £50 in 1638, and who united with others in giving it £20 worth of goods four years after, this cannot now be determined; but the point beyond question is, that he indirectly secured its presence in Cambridge and all the advantages that have come to both college and city from the combination.

Under such circumstances, John Bridge began the duties of what an English poet calls the "mild diaconate"—not so mild then as now. In those days, when the village and parish were one, the minister was commander and the deacon was orderly sergeant. In that capacity John Bridge may have personally beaten the drum which was used in 1636, according to Johnson, to call the people of the village to church. At any rate he doubtless superintended the offices of the church, and the schooling of the children, so far as it went; he was deacon for twenty-two years, selectman for twelve years, and member of the Legislature for four. He was frequently employed in the settlement of estates and in determining the boundaries of towns. He was one of the commissioners appointed by the town when Billerica was set off from it, and his son was one of the first settlers of Lexington, both of these towns having been included in the unwieldy Cambridge of that day. John Bridge's own homestead was outside the village, and included twelve acres not far from where Craigie House now stands; he also owned a strip opposite, on the south side of the Watertown road, and running to the river. It included five acres of marsh and one of upland, perhaps including part of the very field across which our poet Longfellow loved to look at the winding Charles. In this homestead, then a rural region, he lived until his death in 1665; and it is pleasant to find that his son, in transferring a part of the real estate at a later period, describes it as "the mansion house of my honored father, deseased." It is not always that sons remember to express respect for their fathers when disposing of their property.

It is in a similar feeling of respect to that worthy man that we honor his monument to-day. Bronze corrodes and marble crumbles, but they are, nevertheless, among the most permanent of earthly things; and this modest

Puritan name will take long life from this event. One of the most famous of modern English sonnets describes an imaginary traveller in the East as finding in the desert two vast and trunkless legs of stone, with a carved and broken head resting near them. On the pedestal appears, —

> "My name is Ozymandias, king of kings,
> Look on my works, ye mighty, and despair."

And the poet adds: —

> "Nothing beside remains. Round the decay
> Of that colossal wreck, boundless and bare,
> The lone and level sands stretch far away."

But of what consequence was this desolation? The statue fulfilled its object. The disappearance of all else only vindicated the foresight of the monarch, and the name of Ozymandias is immortal. And thus the pious reverence of the descendants of this plain Puritan will achieve its end. The name of John Bridge, rescued from oblivion and made the type of the founders of our civilization, is destined to be transmitted on the lips of children's children yet unborn.

When Col. Higginson had concluded, the Mayor said: —

"From what has been said by the orator of the day, there is no doubt that John Bridge, whom we commemorate, was deeply interested in education, and might have been a worker in its behalf in the early days of our college. It seems eminently fitting, therefore, that a representative of that college should be heard upon this occasion. I introduce to you President Eliot."

President Eliot said: —

"What is this durable monument in stone and bronze to say to us and to coming generations? It will say, —

"It is good to stand stoutly in one's lot, doing faithfully and generously the homely duties of each day.

"It is good to leave behind sturdy and thrifty descendants to transmit one's name and recall one's memory through long generations.

"It is good to have one's life, though humble and obscure, represent to posterity great ideas.

"The simple life of this Puritan pioneer in barren Newtown foretold the life of the teeming millions who in two centuries were to vivify the wild continent. It was a worthy vehicle of three pregnant principles, — freedom of thought, political freedom, and freedom to worship God."

Mayor Fox: —

"You have heard from a descendant of the Puritans, you have also heard from the representative of Harvard College; let me now introduce to you a lineal descendant of John Bridge himself, General, and now Judge Devens."

Judge Devens' Address.

Mr. Mayor: — As a descendant from John Bridge, one degree further removed than my kinsman whose graceful liberality has presented this statue of our ancestor to the city of Cambridge, I thank you for the opportunity of being present upon this occasion. There is little to remind us in this splendid city, adorned with the buildings of its great university, in external things at least, of the humble hamlet defended by its palisade in which a band of exiles struggling with the stern soil, the inhospitable climate, the hostile savage, sought to make for themselves a home in which they could worship God according to the dictates of their own conscience.

It may be true, it no doubt is true, that there are others equally worthy to be commemorated with John Bridge, yet as he has been described to us in the remarks of Col. Higginson, to whose researches we are all sincerely indebted, as its first townsman for many years, as the deacon of its church, as its representative in the councils of the infant colony, he is a suitable representative of the founders of this town. He is in this place also a suitable representative of that great race of men to whom he belonged, the English Puritans.

The Puritan emigration to New England was a part of the struggle which had already commenced between King Charles and his people. However that might end, one place they were determined should exist where they should be free to practise their own faith and to act as that taught them. Profound as was their belief in a higher power, they knew that God works by human means and agencies, and that it was for them to endeavor to compass that for which they prayed by all the instrumentalities at their command. They believed in the sword of the Lord and of Gideon, but the sword of Gideon for them was the good weapon that hung in their own belts, and whose hilt was within the grasp of their own strong right hands.

We may imagine, if we cannot know, the intense interest with which, during the years John Bridge lived here, these people watched the progress of that English Revolution which has made of all who speak the English tongue a free people. Here they heard of the open war in England between their king and his Parliament, of the first doubtful and undecided conflicts under the inefficient commanders on behalf of the Parliament, of the rise of the great Puritan soldier Cromwell, of the victories of Naseby, Dunbar, and finally of Worcester, and of the complete triumph of the Puritan party. Here, too, came later the sad news of that September day when the Lord Protector sank to his eternal rest, and the way was open for the return of the king to England. Although he heard of all these events, John Bridge did not live long enough to know of the second English Revolution which was so promptly responded to in Massachusetts and which finally drove the Stuart kings into exile. To him it may have seemed as if this contest had failed. He certainly could not have realized how vast was the work which the Puritans had done and were to do

on this as well as the other side of the water, or how great was the impression they would make on the people of a vast continent.

Mr. G. W. Curtis has said, "Through all our history, from the deposition of Andros to Bunker Hill, and from the Declaration of Independence to the Proclamation of Emancipation, the dominant power in American civilization has been the genius of Puritan England."

If we look back to the days of the Revolution we see how strong was its influence over those who conducted it. Mr. Winthrop, who (I may, without impropriety say, now that he is absent from us and separated by the stormy sea) emulates so well the dignified and scholarly virtues of his illustrious ancestor, has in one of his recent orations preserved a letter of Col. Prescott which might in its spirit have been written by one of the Puritans themselves. I quote it from memory, and not with entire verbal accuracy. "Our forefathers," says he, "passed the vast Atlantic, spent their blood and treasure that they might enjoy their liberties both civil and religious, and transmit them to their posterity." . . . . "Is not a glorious death in defence of our liberties better than a short and infamous life, and our memory to be had in detestation to the latest posterity? Let us all be of one mind, and stand fast in the liberties wherewith Christ has made us free: and may he of his infinite mercy grant us deliverance out of all our troubles!"

This was a letter written on behalf of the farmers of Pepperell to the inhabitants of Boston some months before the battle of Bunker Hill. As we stand here we recall that summer night of the 16th of June, 1775, when the two regiments selected by Prescott, one his own, the other commanded by Col. Ebenezer Bridge of Lexington, the great-grandson of John, stood here upon this very Common together, and the venerable president of the College came from his study to invoke the blessing of God on their expedition.

Nor, Mr. Mayor, when the hour of trial came in our day and generation to us, was the influence of these Puritan forefathers absent. It is at such a time they will always be freshly remembered. Let then this statue stand, in its simple Puritan garb, in memory of one of the founders of this city, of the race of men to whom he belonged, and in honor to their simple lives, their high courage, and their unswerving faith.

At the conclusion of Judge Devens' address, the audience again joined in singing a hymn with the organ accompaniment.

HYMN. — "AMERICA." J. S. DWIGHT.

God bless our native land!
Firm may she ever stand,
  Through storm and night;
When the wild tempests rave,
Ruler of wind and wave,
Do thou our country save
  By thy great might.

For her our prayer shall rise
To God above the skies,
On him we wait;
Thou who art ever nigh,
Guarding with watchful eye,
To thee aloud we cry,
God save the state!

A benediction was then pronounced by Rev. Edward H. Hall, of the First Parish Church, and the audience then adjourned to the Common to witness the ceremony of unveiling.

The Unveiling.

When all had reassembled around the statue, which was entirely covered with cloth, Mayor Fox spoke as follows: —

"This statue of John Bridge, the Puritan, presented to the city of Cambridge by one of his descendants in the sixth generation, having been formally accepted, it is my direction that it be now unveiled."

At the signal of the Mayor, the folds of the covering quickly separated, and it fell to the base of the statue, disclosing an undoubted impersonation of the typical Puritan, in whose stern and resolute countenance is fully reflected the strong character of the men who founded our New England institutions of freedom and education.

The following inscriptions are upon the pedestal of the statue:

[FRONT.]

JOHN BRIDGE

1578–1665

LEFT BRAINTREE, ESSEX COUNTY, ENGLAND, 1631
AS A MEMBER OF REV. MR. HOOKER'S COMPANY
SETTLED HERE 1632
AND STAID WHEN THAT COMPANY
REMOVED TO THE CONNECTICUT.
HE HAD SUPERVISION OF THE FIRST PUBLIC SCHOOL
ESTABLISHED IN CAMBRIDGE 1635
WAS SELECTMAN 1635–1652
DEACON OF THE CHURCH 1636–1658
REPRESENTATIVE TO THE GREAT AND GENERAL COURT 1637–1641
AND WAS APPOINTED BY THAT BODY TO LAY OUT LANDS
IN THIS TOWN AND BEYOND

[BACK.]

ERECTED
AND GIVEN TO THE CITY
SEPT. 20, 1882,
BY
SAMUEL JAMES BRIDGE,
OF THE SIXTH GENERATION
FROM JOHN BRIDGE.

[RIGHT.]

THEY THAT WAIT UPON THE LORD
SHALL RENEW THEIR STRENGTH.

[LEFT.]

THIS PURITAN
HELPED TO ESTABLISH HERE
CHURCH, SCHOOL
AND REPRESENTATIVE GOVERNMENT
AND THUS TO PLANT
A CHRISTIAN COMMONWEALTH.

RESOLUTIONS PASSED IN THE YEAR 1882

BY THE

CITY COUNCIL OF CAMBRIDGE,

TRIBUTARY

TO THE MEMORY OF DISTINGUISHED CITIZENS DECEASED DURING THE YEAR.

HENRY WADSWORTH LONGFELLOW,

DIED MARCH 24, 1882.

A CONVENTION of both branches of the City Council was held on Wednesday evening, April 5th, in accordance with the following notice, issued by the Mayor and the President of the Common Council: —

CITY OF CAMBRIDGE,
CITY HALL, March 31, 1882.

Dear Sir, — The death of HENRY W. LONGFELLOW removes from our midst a most eminent citizen. A loss so great ought to be borne upon the records of the city. To that end, appropriate resolutions have been prepared, and it is proposed to present them to the two branches of the city government, in convention assembled, at the close of routine business on Wednesday evening next.

It is hoped that members of the two branches will take part in this memorial service by speaking to the resolutions.

Respectfully yours,

JAMES A. FOX, *Mayor*,
GEO. H. HOWARD,
President of Common Council.

Upon both boards being seated, the Mayor arose and said: "The death of Henry W. Longfellow is one of those events that should not pass unnoticed. It is the decease of a man who was beloved by the people, and by the children of every clime. It should therefore receive some public notice on the part of the City Council of Cambridge, for the deceased has honored the city by his residence here. When the sad tidings of his death

was received by the Chair, I directed that the bells be tolled, to announce the sad intelligence, and offered to the bereaved family such services in the performance of any act in tribute to his memory as might not be inconsistent with the occasion. I have also caused the following memorial tribute to be prepared by the Clerk of Committees, which is submitted for your approval: —

City of Cambridge.
In Convention of the City Council, April 5, 1882.

MEMORIAL TRIBUTE.

With universal accord all hearts in every civilized land are touched with a deep sense of the breavement sustained in the recent death of Henry Wadsworth Longfellow, the nation's illustrious poet and our distinguished citizen, who expired at his home in this city on the 24th of March last, and it is deemed fitting that the City Council of Cambridge, upon the occasion of the first joint assembling of both branches thereof since the sad event, should take appropriate notice of the general loss.

Mr. Longfellow was a resident in this community, town and city, for nearly half a century; and although his scholarly pursuits forbade his mingling largely in local affairs, he was nevertheless deeply interested in the prosperity of this ancient town. The historic value of many well-known places within our territorial limits, and other associations connected with our growth in the past, have been rendered yet more conspicuous through the efforts of his active pen. As he has recited in his undying verse, his familiar home on Brattle Street was once the dwelling-place of the Father of his country, where

> "Up and down the echoing stairs,
> Heavy with the weight of cares,
> Sounded his majestic tread."

In a beautiful apostrophe, he has also immortalized the stream that marks our southern boundary: —

> "River that in silence windest,
> Through the meadows bright and free."

Much of his poetry that is local in reference is thus joined with his memory to our history forevermore. It has been said that "a great poet builds his own temple." What a monumental structure, then, has he erected in this bereaved city!

The personal tribute of the arm-chair, made from wood of the "Spreading Chestnut Tree," which was presented to him by the pupils of our public schools, and his graceful verses in response, so "tender, musical, and terse," and again, the generous greeting accorded to him at our two hundred and fiftieth anniversary celebration, attest the depth of the sympathy which existed between the poet and the children of Cambridge. As a fellow-citizen with us, connected in all the various relations

of local life, his influence was of the most refining nature, and his presence among us was ever an incentive to noble actions, a constant reminder "that we may make our lives sublime."

Peacefully and brightly his sun has sunk below the horizon, and although the light of his visible presence for us is extinguished forever, his fame shall continue to shed unfading lustre upon this city, which was his chosen home, and which he loved so well. It is therefore

Resolved, That the City Council of Cambridge recognizes the public loss sustained in the recent death of our fellow-citizen and friend, Henry Wadsworth Longfellow, whom we may fitly designate as this century's great bard of affection, consolation, and hope. The civilized world mourns his decease as that of an eminent moralist and poet, whose melodious and inspiring strains have "lifted up and strengthened" thousands of drooping hearts, bearing to them "that affection that hopes and endures and is patient." We in the narrower circle of the city of his adoption claim a special right to lament the loss of a wise counsellor, a sympathizing friend, and a good citizen. The memory of his genial presence in our midst cannot perish from the heart of this community, but must abide and grow brighter with advancing years

Resolved, That this expression of the feelings of the City Council, concerning the death of a citizen, so loved, respected, and renowned, be made a part of the city records, and a copy thereof be forwarded to the poet's family.

The foregoing resolutions were unanimously adopted by a rising vote.

A portrait of the deceased poet, tastefully ornamented with festoons of smilax, was suspended beneath the clock in rear of the President's chair during the evening.

JAMES DIMAN GREEN,

First Mayor of Cambridge, 1846. Mayor, 1846, 1847, 1853, 1860, 1861.
Died Aug. 18, 1882. Aged Eighty-four.

The death of Ex-Mayor Green having occurred during the vacation of the City Council, notice thereof was taken at its first regular meeting after the summer adjournment, which meeting was held Sept. 6th.

The Mayor appropriately alluded to the death of the venerable ex-mayor, stating that at the time he had caused a notice of the event, with an invitation to the funeral, to be sent to the several ex-mayors and those who had served with the deceased in the City Council. He suggested that a joint special committee be appointed to prepare appropriate resolutions for the occasion.

The suggestion being adopted in concurrence, the following were appointed as such committee: The Mayor, and Alder-

men Gooch and Nichols, President Howard, and Councilmen McDaniel, Holton, and Allison.

At the meeting of the City Council, Sept. 20, 1882, a resolution was reported as follows: —

City of Cambridge,
In Board of Aldermen, Sept. 20, 1882.

IN MEMORIAM.

Whereas, Since the summer adjournment of the City Council in the month of July last, there has passed away an eminent and much respected citizen of Cambridge, Hon. James Diman Green, the first Mayor of the city, who died at his residence, Aug. 18, 1882, at the advanced age of eighty-four years, it is

Resolved, That the City Council desires to offer its tribute of respect to the memory of Hon. James Diman Green, first Mayor of Cambridge, and to signify to the fullest extent its deep appreciation of the many and valuable services rendered by him to the city during its earlier municipal years. While the occasion of the decease of one whose life had extended far beyond the allotted term of human existence may not perhaps be that of mourning, especially when death comes as a liberator from the increasing burdens of age, yet this city, for whose general good he once so actively labored, and in whose welfare he maintained such an abiding interest, may fitly lament his loss, whose living presence among us was a constant example of incorruptible integrity and singular faithfulness to his conception of duty. We may refer with feelings of gratitude and pride to that period in our local history when, upwards of thirty-six years ago, under his careful guidance, our city started upon its municipal career, and also remember with equal satisfaction those later years of 1853 and 1860 and 1861, when he was again called by the popular will to the Mayor's chair. A trusted and faithful adviser in town affairs in years immediately preceding the adoption of the city charter, he was wisely adjudged likely to become an efficient and able Mayor of the young municipality, and it is doubtless to him that we are mainly indebted for the foundation of that high financial character which our city has constantly maintained. Fortunate, indeed, may it prove in the years to come if future city governments shall remember and be guided by his prudent counsel, pausing ere they enter upon projects of doubtful utility, and involving excessive outlays from the public treasury. A wise counsellor, an upright chief magistrate, and a faithful public servant has passed away. Long may his memory be cherished in the hearts of all good citizens.

Ordered, That a copy of the foregoing resolve be forwarded to the family of the deceased.

The resolution and order were adopted by a rising vote.

OBED C. TURNER, M. D.,

Assistant City Physician, Died Oct. 31, 1882. Aged Forty-two Years.

Dr. Turner was the faithful and able physician in attendance upon the sick at the almshouse and of the sick poor

throughout the city. He had been engaged in this service for about three years, having been appointed at the beginning of the year 1880. Undertaking the charge of six cases of typhus fever, which occurred in the month of October in the rear of 29 Winthrop Street, and which cases were subsequently transferred to the hospital at the almshouse, the doctor himself was soon after stricken with the disease, and after an illness of about ten days he died, Oct. 31st, at the early age of forty-two years.

Dr. Turner was a member of the Board of School Committee, which appropriately noticed his lamented decease.

The attention of the City Council was called to the event, at its meeting on Wednesday, Nov. 15th, and the following joint special committee appointed for the preparation of resolutions, viz., Aldermen Corcoran and Grover, and Councilmen Allison, Bancroft, and Henderson.

The following resolution reported by the committee was adopted in concurrence, on the 6th of December: —

City of Cambridge,
In Board of Aldermen, Dec. 6, 1882.

Whereas, The attention of the two branches of the city government has been called to the lamented death of Dr. Obed C. Turner, Assistant City Physician, it is therefore

Resolved, That the City Council hereby testifies to the fulness of its appreciation of the great loss which has fallen upon this community in the death of Dr. Obed C. Turner, for the past three years Assistant City Physician. Skilful and accomplished in the practice of his professional duties, he brought to their discharge an unselfish devotion to which his valuable life at length became a sacrifice. Beloved and respected in all his social relations wherever among our citizens his acquaintance had extended, his death will be deeply mourned. Especially will he be missed in the numerous homes of the poor, where his kindly presence so often brought consolation and hope. Faithful unto death, he has entered into his reward.

It is ordered, That a copy of this resolution be sent to the bereaved family.

ORDINANCES

PASSED SINCE THE REVISION OF THE ORDINANCES.

An Ordinance in Relation to the Salary of the City Physician.

SECTION 1. From and after the first Monday of January, 1880, the salary of the City Physician shall be at the rate of $1,000 per annum.

SECT. 2. So much of Sect. 1 of Chap. 27 of the Revised Ordinances as is inconsistent herewith is hereby repealed.

[*Adopted March* 3, 1880.]

An Ordinance in Amendment of the Thirty-sixth Chapter of the Revised Ordinances.

Sect. 27 of Chap. 36 of the Revised Ordinances is hereby amended, by prefixing to the words in said section the following words: "No person shall swim or bathe, or permit any animal under his care to swim or bathe, in Fresh Pond."

[*Adopted June* 2, 1880.]

An Ordinance establishing the Salary of the Inspector of Vinegar.

SECTION 1. The salary of the Inspector of Vinegar shall be at the rate of $175 per annum.

SECT. 2. This ordinance shall take effect upon its passage.

[*Adopted Nov.* 3, 1880.]

An Ordinance in Amendment of an Ordinance in Relation to Accounts and Finance.

Chap. 6 of the Revised Ordinances is hereby amended by adding at the end of Sect. 24 the words: "The Committee on Finance shall employ such clerks, permanent and temporary, as may be necessary in the different departments. The duties and compensation of such clerks shall be determined by said committee, subject, however, to change at any time by order of the City Council. No head of a department shall employ any extra clerical assistance in behalf of the city without having first obtained the consent of the Committee on Finance."

[*Adopted Nov.* 3, 1880.]

An Ordinance in Amendment of an Ordinance in Relation to the Cambridge Public Library.

Chap. 7 of the Revised Ordinances is hereby amended by striking out the second section thereof and inserting in its place the following: —

"SECT. 2. The care, superintendence, and management of said library shall be vested in a Board of Trustees, to consist of one member of the Board of Aldermen, one member of the Common Council, and five citizens at large, one of whom shall hold office for one year, one for two years, one for three years, one for four years, and one for five years, their several terms of office to be determined by lot, the same to be chosen in the month of January next, and annually thereafter in the month of January one citizen at large, whose term of office shall be for five years from the third Monday in said January, unless sooner removed."

Also, in the third section, by striking out the word "three" in the fifth line thereof, and substituting therefor the word "five," relating to the term of office of the trustees.

Also, by striking out the fourth section, and inserting in place thereof the following: —

"SECT. 4. Said trustees may choose from their number a chairman and secretary; they shall choose, annually, in the month of January, a suitable person to be librarian, who shall be removable at the pleasure of the board, and shall receive such compensation as the trustees may from time to time determine."

The foregoing amendments shall take effect on the first Monday in the month of January, 1881, except that the trustees heretofore elected shall hold office until their successors are chosen and qualified.

[*Adopted Nov.* 17, 1880.]

An Ordinance in Amendment of an Ordinance in Relation to Sinking Funds.

Chapter 34 of the Revised Ordinances is hereby amended by striking out the last five lines of Sect. 4, and inserting in place thereof the following words: —

"And whenever any payment is so made before the thirtieth day of November, interest shall be paid thereon by the Commissioners of the Sinking Funds, from the time of said payment until said thirtieth day of November, at such rates as the Committee on Finance shall from time to time determine."

[*Adopted Nov.* 17, 1880.]

An Ordinance in Amendment of an Ordinance in Relation to Accounts and Finance.

Chap. 1 of the Revised Ordinances is hereby amended by inserting in the eighth line of the seventh section thereof, after the word "repair,"

the words "and shade trees and public grounds"; also, in the fourteenth line of the same section, by striking out the words "shade trees and public grounds."

[*Adopted Nov.* 17, 1880.]

An Ordinance in Relation to the Compensation of the Assistant City Clerk.

Chapter 27 of the Revised Ordinances is hereby amended, as follows, viz.: —

"The salary of the Assistant City Clerk shall be twelve hundred dollars per annum, to date from Jan. 1, 1881."

[*Adopted March* 23, 1881.]

An Ordinance in Amendment of the Ordinance in Relation to the Water Works.

Section 25 of Chapter 39 of the Revised Ordinances is hereby amended by striking out the word "thirty," in the second line of the second paragraph, and inserting in place thereof the word "fifteen."

[*Adopted May* 18, 1881.]

An Ordinance in Amendment of an Ordinance in Relation to Streets.

Chapter 36 of the Revised Ordinances is hereby amended by adding at the end of Section 26 the following: —

"Whoever shall be found in possession of a club or bludgeon, on any street, park, or way, with intent to use the same in sports, sham fights, or strife, or to intimidate persons or horses, shall be fined not less than one dollar nor more than twenty dollars.

"Whoever shall be found in possession of toy pistols, crotches, rubber slings, or other devices for throwing missiles of any kind, with intent to use the same to the injury of persons or property, or to the annoyance or discomfort of any person, upon any street, park, or way, shall be fined not less than one dollar nor more than twenty dollars."

[*Adopted Dec.* 7, 1881.]

An Ordinance in Amendment of an Ordinance in Relation to Streets.

Chapter 36 of the Revised City Ordinances is hereby amended, as follows, in Section 14, by inserting in the fifth line, after the word "aldermen," the words, "or some person by them authorized for that purpose."

Also, in Section 15, by inserting in the first line, after the word "aldermen," the words, "or some person by them authorized for that purpose."

[*Adopted Dec.* 28, 1881.]

An Ordinance in Amendment of an Ordinance in Relation to Sewers.

Sections 9 and 10 of Chapter 32 of the Revised City Ordinances are hereby repealed, the same being in relation to house drainage.

Section 12 of Chapter 32 of the Revised City Ordinances is hereby amended by striking out of the first line thereof the words, "and catch-basins."

[*Adopted Dec.* 28, 1881.]

An Ordinance in Amendment of an Ordinance in Relation to the Fire Department.

Chapter 16 of the Revised Ordinances is hereby amended by striking out the second section thereof, and inserting in its place the following: —

"SECT. 2. In the month of April, in the year eighteen hundred and eighty-two, there shall be appointed by the Mayor, with the approval of the Board of Aldermen, and the concurrence of the Common Council,— or, in default thereof, afterward, by a concurrent vote of the City Council, either branch acting first,—a chief engineer and three assistant engineers, who shall hold their offices until removed by the City Council, and until others are elected in their places. Whenever a vacancy occurs in either of the offices named herein, the same shall be filled forthwith, in the same manner as herein before prescribed."

Also, by striking out the fifteenth section, and inserting in its place the following: —

"SECT. 15. The Mayor and Aldermen shall, in the month of January, in the year eighteen hundred and eighty-two, and whenever vacancies occur, appoint the several engine, hose, and hook and ladder companies, whose term of service shall continue until the respective appointees are removed by the Mayor and Aldermen, and others appointed in their places; and the members of said companies shall receive a warrant substantially like that prescribed for the engineers."

[*Adopted Dec.* 28, 1881.]

An Ordinance in Amendment of an Ordinance in Relation to Salaries.

Section 1 of Chapter 27 of the Revised Ordinances is so amended that from the first day of February, 1882, the compensation of members of the Fire Department shall be as follows: —

Chief Engineer, per year, $1,200.

[*Adopted April* 5, 1882.]

An Ordinance in Relation to the Compensation of the Clerk of the Board of Engineers of the Fire Department.

The compensation of the Clerk of the Board of Engineers of the Fire Department shall be at the rate of $25 per annum; such rate to take effect as of Jan. 1, 1882.

[*Adopted April* 5, 1882.]

An Ordinance in Amendment of an Ordinance in Relation to Water Works.

Section 24 of Chapter 39 of the Revised Ordinances is hereby amended by adding after the word "follows," at the end of the second paragraph, the words "*provided*, *however*, that the charge shall not be less than ten dollars for any one year; and *provided further*, that when the water used by any one taker shall amount to more than five million gallons in any one year commencing with the first day of July, then the charge shall be at the rate of one cent for each one hundred gallons of the excess over that quantity."

[*Adopted April* 12, 1882.]

An Ordinance in Relation to the Salary of the Superintendent of Lamps.

Chapter 27 of the Revised Ordinances is hereby amended as follows: —

The salary of the Superintendent of Lamps shall be five hundred dollars per annum, to date from June 1, 1882.

[*Adopted June* 28, 1882.]

An Ordinance in Amendment of an Ordinance in Relation to Streets.

Section 25 of Chapter 36 of the Revised Ordinances is hereby amended by striking out the entire section and inserting in place thereof the following: —

The owner or tenant of any land abutting on any street, lane, court, square, or public place, where there is any footway or sidewalk, shall cause the snow falling on said footway or sidewalk in front of his said land, whether from any building or otherwise, to be removed therefrom within twenty-four hours after the same ceases to fall; and shall cause the ice which encumbers such footway or sidewalk to be removed or covered with sand or other suitable substance, so as to make the footway or sidewalk safe and convenient for travel. Any person failing to do so shall be fined not less than two nor more than twenty dollars.

[*Adopted July* 19, 1882.]

An Ordinance in Relation to the Boundaries of the several Wards, and the Number of Members of the Common Council to be elected in each Ward.

SECTION 1. The boundaries of the several wards shall, until the month of October, in the year eighteen hundred and eighty-seven, continue the same as now established, with the following exceptions: —

So much of the territory annexed from the town of Belmont as lies south of a line through the centre of Concord Avenue shall constitute a part of Ward One; and so much of said territory as lies north of such line shall constitute a part of Ward Five.

SECT. 2. The members of the Common Council shall be apportioned as follows: Ward One shall elect FOUR; Ward Two shall elect SIX; Ward Three shall elect FOUR; Ward Four shall elect FOUR; Ward Five shall elect TWO.

[*Adopted Oct.* 25, 1882.]

An Ordinance substituting the words "Third District Court of Eastern Middlesex" for the words "Police Court."

Wherever, in any ordinance of the city, the words "Police Court" occur, they are hereby stricken out, and the words "Third District Court of Eastern Middlesex" are hereby inserted in place thereof.

[*Adopted Nov.* 29, 1882.]

An Ordinance in Amendment of an Ordinance in Relation to Sewers.

Section 1 of Chapter 32 of the Revised Ordinances is hereby amended by adding at the end thereof the words: —

"Nor until the owner shall have paid to the city, as a charge for entering the public sewer, such a sum of money as the Mayor and Aldermen shall order; said sum to be not less than the amount which would be assessed upon the lands of such owner, upon the basis of the present ordinance in the case of a public sewer, less such an allowance for the cost of the private sewer as the City Engineer shall certify to the Mayor and Aldermen is reasonable."

[*Adopted Dec.* 27, 1882.]

An Ordinance in Amendment of an Ordinance in Relation to the City Physician.

Chapter 25 of the Revised Ordinances is hereby amended as follows: —

By striking out the last twenty words of the first section, providing a salary for the City Physician.

Also, by striking out the second section, and inserting in place thereof the following: —

"SECT. 2. There shall also be chosen annually, in the month of April, by the Overseers of the Poor, subject to the approval of the Mayor and Aldermen, a physician, to be called the Assistant City Physician, who, under the direction of the Overseers of the Poor, shall act as the almshouse physician and shall visit and prescribe for the sick poor in the city, outside of the almshouse. His salary shall be fixed by the City Council."

Also, by striking out the word "He," at the beginning of the third section, and inserting in place thereof the words, "The Assistant City Physician"; and the word "He," at the beginning of each subsequent section, shall be held to designate the Assistant City Physician only.

Also, by striking out the words "City Council" in the seventh section, and inserting in place thereof the words, "Overseers of the Poor."

Also, by striking out the eighth section.

[*Adopted Dec.* 27, 1882.]

An Ordinance in Amendment of an Ordinance in Relation to the Pay of City Laborers.

Section 11 of Chapter 1 of the Revised Ordinances is hereby amended by adding at the end thereof the words: —

"And provided further, that he shall, without action by the committee aforesaid, draw his order for the semi-monthly payment of the wages of the laborers employed in the Street Department; the amounts of such wages to be entered upon pay-rolls which shall be certified as correct by a majority of the Joint Standing Committee on Roads and Bridges; such amounts to be within the appropriation to which the same shall be chargeable."

[*Adopted Feb.* 19, 1883.]

MAYORS

OF

THE CITY OF CAMBRIDGE

FROM 1846 TO 1883.

James D. Green	from May,	1846,	to April,	1848.
Sidney Willard . . .	" April,	1848,	to April,	1851.
George Stevens	" April,	1851,	to April,	1853.
James D. Green	" April,	1853,	to April,	1854.
*Abraham Edwards . .	" April,	1854,	to January,	1855.
Zebina L. Raymond . .	" January,	1855,	to January,	1856.
John Sargent	" January,	1856,	to January,	1860.
†James D. Green	" January,	1860,	to July 24,	1861.
‡Charles Theo. Russell .	" July 31,	1861,	to January,	1863.
George C. Richardson .	" January,	1863,	to January,	1864.
Zebina L. Raymond . .	" January,	1864,	to January,	1865.
J. Warren Merrill . .	" January,	1865,	to January,	1867.
Ezra Parmenter . . .	" January,	1867,	to January,	1868.
Charles H. Saunders .	" January,	1868,	to January,	1870.
Hamlin R. Harding . .	" January,	1870,	to January,	1872.
Henry O. Houghton . .	" January,	1872,	to January,	1873.
Isaac Bradford	" January,	1873,	to January,	1877.
Frank A. Allen . . .	" January,	1877,	to January,	1878.
Samuel L. Montague .	" January,	1878,	to January,	1880.
James M. W. Hall . . .	" January,	1880,	to January,	1881.
James A. Fox	" January,	1881.	Now in office.	

* Municipal year changed. † Resigned.

‡ First elected by the City Council.

GOVERNMENT

OF

THE CITY OF CAMBRIDGE.

1883.

MAYOR.

HON. JAMES A. FOX.

ALDERMEN.

STEPHEN ANDERSON.	GEORGE A. DAVIS.
CHARLES A. AUSTIN.	GEORGE W. GALE.
CHARLES BULLOCK.	JOHN READ.
JOHN CLARY.	WILLIAM E. RUSSELL.
JOSEPH COGAN.	SOLOMON S. SLEEPER.

Aldermen, by Wards.

Ward 1.	Aldermen	READ and RUSSELL.
" 2.	"	DAVIS and GALE.
" 3.	"	ANDERSON, AUSTIN, CLARY, and COGAN.
" 5.	"	BULLOCK and SLEEPER.

Clerk.

JUSTIN A. JACOBS.

COMMON COUNCIL.

GEORGE H. HOWARD, *President.*

CORNELIUS G. H. BENNINK.
GEORGE C. BENT.
WILLIAM F. BRADBURY.
DAVID F. BURNS.
GEORGE CLOSE.
JAMES E. DOYLE.
CHARLES L. FULLER.
CHARLES W. HENDERSON.
GEORGE H. HOWARD.
ARTHUR E. JONES.
WILLIAM C. LANE.
P. ALLEN LINDSEY.
NATHAN C. LOMBARD.
TIMOTHY MCCARTHY.
JOHN P. MCCORMICK.
SAMUEL W. MCDANIEL,
WILLIAM T. NEILON.
MALCOLM E. RIDEOUT.
JOHN G. THOROGOOD.
JAMES H. WELLS.

Common Council, by Wards.

Ward 1. Messrs. BRADBURY, BURNS, JONES, and MCDANIEL.
" 2. " BENNINK, BENT, CLOSE, LANE, LINDSEY, and LOMBARD.
" 3. " DOYLE, HOWARD, MCCORMICK, and NEILON.
" 4. " HENDERSON, RIDEOUT, THOROGOOD, and WELLS.
" 5. " FULLER and MCCARTHY.

Clerk.

WALTER W. PIKE.

Page.

WILLIAM PEARSON.

CITY CLERK.

JUSTIN A. JACOBS.

ASSISTANT CITY CLERK.

WALTER W. PIKE.

CITY MESSENGER.

FRANCIS L. PRATT.

COMMITTEES OF THE CITY COUNCIL.

Joint Standing Committees.

On Finance.

	Common Council.
The Mayor.	The President.
	George C. Bent.
	Samuel W. McDaniel.
	James H. Wells.
Aldermen.	
John Read.	Arthur E. Jones.
Solomon S. Sleeper.	P. Allen Lindsey.

On Public Instruction.

Aldermen.	Common Council.
Joseph Cogan.	The President.
William E. Russell.	William F. Bradbury.
	Malcolm E. Rideout.
	William C. Lane.

On Ordinances.

Aldermen.	Common Council.
John Read.	James H. Wells.
William E. Russell.	William F. Bradbury.
	Malcolm E. Rideout.

On Accounts.

Aldermen.	Common Council.
John Clary.	Nathan C. Lombard.
Charles Bullock.	John P. McCormick.
	George Close.

On Public Property.

Aldermen.	Common Council.
John Clary.	Samuel W. McDaniel.
George W. Gale.	James H. Wells.
	George C. Bent.

On the Almshouse.

Aldermen.	Common Council.
Solomon S. Sleeper.	James E. Doyle.
Stephen Anderson.	P. Allen Lindsey.
	Charles L. Fuller.

On Roads and Bridges.

Aldermen.	Common Council.
Solomon S. Sleeper.	Cornelius G. H. Bennink.
George W. Gale.	Charles W. Henderson.
	David F. Burns.

On Fuel.

Aldermen.	Common Council.
George A. Davis.	James E. Doyle.
Charles A. Austin.	John G. Thorogood.
	William F. Bradbury.

On Lamps.

Aldermen.	Common Council.
Stephen Anderson.	Samuel W. McDaniel.
George W. Gale.	Timothy McCarthy.
	Malcolm E. Rideout.

On Printing.

Aldermen.	Common Council.
William E. Russell.	John G. Thorogood.
Charles A. Austin.	William C. Lane.
	Timothy McCarthy.

On the Fire Department.

Aldermen.	Common Council.
George A. Davis.	Charles W. Henderson.
Stephen Anderson.	George C. Bent.
	James E. Doyle.

On City Engineering.

Aldermen.	Common Council.
John Clary.	William T. Neilon.
William E. Russell.	Timothy McCarthy.
	George Close.

On Assessors' Department.

Alderman.	Common Council.
John Read.	Charles L. Fuller.
	Cornelius G. H. Bennink.

On Claims.

	Common Council.
The Mayor.	The President.
	Cornelius G. H. Bennink.
Aldermen.	
William E. Russell.	Arthur E. Jones.
Joseph Cogan.	Nathan C. Lombard.
Charles Bullock.	William T. Neilon.
	John G. Thorogood.

Special Committee of Board of Aldermen.

On Soldiers' Aid.

John Read. Charles A. Austin.
George A. Davis. Joseph Cogan.
Charles Bullock.

Standing Committees of Board of Mayor and Aldermen.

On Police.

The Mayor. George A. Davis.
John Read. Stephen Anderson.

On the Fire Department.

George A. Davis. Stephen Anderson.
Charles A. Austin.

On Roads and Bridges.

Solomon S. Sleeper. George W. Gale.
Stephen Anderson.

On Sewers and Drains.

Solomon S. Sleeper. Joseph Cogan.
Charles Bullock.

On Licenses.

Solomon S. Sleeper. Charles A. Austin.
Stephen Anderson.

On Health.

John Clary. George W. Gale.
Charles A. Austin.

On Bonds.

George A. Davis. Joseph Cogan.
William E. Russell.

On Claims.

The Mayor. Joseph Cogan.
William E. Russell. Charles Bullock.

Standing Committees of the Common Council.

On Elections and Returns.

Arthur E. Jones. George Close.
John P. McCormick.

On Bills in the Second Reading.

Charles W. Henderson. Charles L. Fuller.
William C. Lane.

On Enrolled Ordinances.

Nathan C. Lombard. David F. Burns.
William T. Neilon.

Clerk of Committees.

John McDuffie.

Board of Health.

Henry P. Walcott, *City Physician.*
Daniel H. Thurston. George F. Piper.

Health Officer.

Alfred F. Holt, M. D.

Assistant City Physician.

——— ——— M. D.

Health Officers.

Frederick W. Hagar. George H. Copeland.
Mark J. Folsom. Lothrop J. Cloyes.
John F. Murray.

Surveyors of Highways.

The same persons who compose the Board of Mayor and Aldermen.

Auditor of Accounts.

Franklin Perrin.

Treasurer.

William W. Dallinger.

Assessors.

Andrew J. Green. Edmund B. Whitman.
Artemas Z. Brown.

Assistant Assessors.

Charles H. Hunnewell. George L. Mitchell.
John S. Pollard. Joseph Whittemore.
William E. Hutchins.

School Committee.

James A. Fox, Mayor, *ex officio*, *Chairman.*

Ward I.

Clement L. Smith. John L. Hildreth.
Francis Flint.

Ward II.

Benjamin F. Tweed. Henry N. Tilton.
Phebe M. Kendall.

Ward III.

Edward B. Malley. John Conlan.
Frank P. Scully.

Ward IV.

William H. Orcutt. Asa P. Morse.
Sarah S. Jacobs.

Ward V.

William A. Start. Jabez A. Sawyer.
Albert M. Barnes.

Secretary.

W. W. Wellington.

Superintendent of Schools.

Francis Cogswell.

Overseers of the Poor.

The MAYOR, *ex officio*, *Chairman*.

Sumner Albee. George D. Chamberlain.
Jonas C. Wellington. Charles E. Vaughan.
Knowlton S. Chaffee.

Secretary and Visitor.

Vespasian Danforth.

Warden of the Almshouse.

William E. Hough.

Physician of the Almshouse.

——— ——— (*Assistant City Physician*).

Cambridge Cemetery.

Commissioners.

The MAYOR, *ex officio*.

George S. Saunders. John F. O'Brien.
George T. Gale. Curtis Davis.
Silas B. Buck. John M. Tyler.

Superintendent.

James K. Farwell.

Trustees of Cambridge Public Library.

Alderman. **Common Council.**

Charles Bullock. Samuel W. McDaniel.

Citizens at Large.

George H. Folger. Hersey B. Goodwin.
John S. March. Samuel L. Montague.
John Conlan.

Librarian. **Secretary.**

Miss Almira L. Hayward. John Conlan.

Cambridge Water Board.

The MAYOR, and President of the Common Council, *ex officio*.

Chester W. Kingsley. George P. Carter, *President*.
Henry L. Eustis. Knowlton S. Chaffee.
James M. W. Hall.

Clerk.

Justin A. Jacobs.

Superintendent of Water Works.

Hiram Nevons.

Water Registrar.

J. Warren Cotton.

Trustees of Sinking Fund of Water Loan.

The MAYOR, City Treasurer, and President of the Common Council.

Commissioners on Sinking Funds of the City.

John M. Tyler. Joseph A. Holmes.
Robert Douglass. Charles H. Saunders.
Frank A. Allen. Knowlton S. Chaffee.

Trustees of the Sanders Temperance Fund.

The MAYOR, and President of the Common Council, *ex officio*.

Alderman.	Common Council.
John Clary.	George Close.
	John G. Thorogood.

Trustees of the Bridge Charitable Fund.

The MAYOR, and President of the Common Council, *ex officio*.

Alderman.

Solomon S. Sleeper.

Trustees of the Dowse Institute.

The Mayor, and President of the Common Council, *ex officio*.
William W. Wellington. Willard A. Bullard.
Frank A. Allen.

Representatives in General Court.

Chester W. Kingsley. Lewis W. Howes.
William A. Bancroft. John W. Wilkinson.
George D. Chamberlain. Joseph J. Kelley.

Police Court.

Standing Justice.

William H. Orcutt.

Special Justices.

Samuel W. McDaniel. Jabez Fox.

Clerk.

Emerson W. Law.

City Solicitor.

John W. Hammond.

City Engineer.

William S. Barbour.

Commissioner on West Boston, Craigie's, and Prison Point Bridges.

Superintendent of Streets.

Bainbridge W. Woodard.

Superintendent of Lamps.

Benjamin F. Nourse.

Board of Engineers.

Chief Engineer.

Thomas J. Casey.

Assistant Engineers.

First Assistant	Nathaniel W. Bunker.
Second Assistant	Charles W. Brackett.
Third Assistant	William B. Cade.

Secretary of the Board.

Nathaniel W. Bunker.

Police Department.

Chief of Police.

Frederick W. Hagar.

Captains of Police.

District I.	District II.
Lothrop J. Cloyes.	George H. Copeland.

District III.

John F. Murray.

Captain of Night Police.

Mark J. Folsom.

Sergeants of Police.

William F. Batchelder.	Thomas S. Hall.
Andrew Sproul.	Michael A. Dalton.
Frederick B. Pullen.	William Mullett.

Policemen.

James S. Alexander.
Benjamin F. Bridden.
Edward F. Belcher.
Elbridge S. Blen.
George T. Barrington.
Edward Brady.
Daniel Callahan.
Denis Corcoran.
Timothy Corcoran.
Michael J. Conry.
George S. Dudley.
Patrick Doyle.
Thomas F. Dynan.
Lawrence J. Ducey.
John W. Deehan.
Rufus S. Downe.
William Evans, Jr.
Warren A. Eaton.
Joseph H. Furbush.
William Gallagher.
Robert T. Hixon.
Luther Hapgood.
Simon D. Hiscock.
Benjamin F. Higgins.
Moses W. Hooper.
Alonzo S. Harriman.
Amos Jones.
Henry C. Jones.
James M. Keaney.
Thomas H. Lucy.
Cornelius A. Murphy.
James McChristal.
George A. Marston.
William H. McMenimen.
Hugh McNamee.
James E. Murray.
James McElroy.
Matthew R. Moore.
Michael J. Nolan.
William Nickelson.
Charles W. Priest.
Charles L. Pike.
Bernard J. Roper.
Thomas F. Sullivan.
John E. Shaughnessy.
Andrew G. Smith.
Leonard Shackford.
David A. Stevens.
Frank W. Scobey.
John W. Skelley.
John B. Smithers.
William Twist.
James W. Wright.
Orrin B. White.
John Wiley.
John H. Wells.

Policemen (without pay).

J. L. P. Ackers.
Horace A. Allyn.
Mark H. Appleby.
Fred. H. Balch.
Thomas Briney.
William H. Bates.
Alexander A. Barker.
Charles Brousseau.
Nathaniel W. Bunker.
Ferdinand N. Buffum.
Daniel A. Buckley.
Frank E. Balch.
Joseph Beaubo.
Charles W. Brackett.

Solomon M. Busnach.
Richard Balmer.
Thomas J. Casey.
Charles S. Childs.
John Coffee.
Joseph Collins.
William Collins.
Moses M. Child.
Noah M. Cofran.
Charles Coy.
Lewis B. Chandler.
Patrick Corcoran.
Ambrose H. Clark.
John Collier.
Micah W. Cook.
James Doherty.
George W. Durgin.
James F. Dunn.
William H. Dodge.
Moses Dudley.
Thomas H. Eames.
George D. Eaton, Jr.
Frank A. Edson.
Henry L. Emerson.
John E. Fitzgerald.
G. C. W. Fuller.
James K. Farwell.
Dennis J. Fielding.
William Foster.
John Gorman.
Michael Ginty.
William H. Grieves.
Charles A. Gay.
William T. Gibson.
George W. Greenleaf.
Major Gaines.
Eli L. Goodrow.
Angus M. Hamilton.
Charles F. Hittinger.
Samuel F. Hunt.
Henry L. Hale.
Charles E. Hadcock.
Appleton Hubbard.
William Hunnewell.
William E. Hough.
Thomas M. Howard.
Martin J. Hannon.
Benjamin Kennard.
Barney King.
Roland Litchfield.
William O. Lowell.
Martin V. Langley.
James W. Lovering.
George B. Lothrop.
John Loughrey.
John Little.
Abiel E. Long.
Charles S. Lincoln.
Patrick McCarthy.
Dennis Murphy.
John H. Menard.
Thomas Montgomery.
Francis M. Mason.
Benjamin McIlvaine.
Patrick F. Murray.
Patrick Murphy.
Philip McGovern.
Robert McKillican.
Augustus W. Nelson.
Hiram Nevons.
William A. Norris.
George R. Oliver.
Francis A. Osborn.
Thomas F. O'Brien.
Linn B. Porter.
William F. Peck.
Thomas Preston.
Joseph A. Pike.

Francis L. Pratt.
Eben Pratt.
William N. Porter.
Benjamin J. Pierce.
Lewis Pratt.
John Riley.
P. H. Raymond.
Charles L. Russell.
John W. Richmond.
John J. Ryan.
John Ring.
George Smyth.
Joshua S. Sanborn.
Alex. F. Shepherd.
James T. Shaughnessy.
Charles H. Stetson.
John H. Steward.
Philip Sullivan.
Thomas F. Sullivan.
Henry Smith.
George J. Sutton.
George W. Tower.
William S. Wilson.
Bainbridge W. Woodard.
Edgar L. Worcester.
Edward M. Williams.

Keeper of Lock-ups.

Frederick W. Hagar.

Truant Officers.

Moses M. Child.
John Collier.
Francis M. Mason.

Probation Officer.

Frederick W. Hagar.

Constables.

Frederick W. Hagar.
William Twist.
John C. Burdakin.
Frederick A. Lull.
Thomas T. Ferguson.
Michael S. Busnach.
Charles J. Adams.
John L. Boynton.
Lothrop J. Cloyes.
Charles H. Hunnewell.
Appleton Hubbard.
William Evans, Jr.
Joseph Fox.
Fred. H. Seavey.
John F. Murray.
James I. Murphy.
John Lennon.
Thomas J. Stevens.
John R. Fairbairn.
Dennis D. McCarthy.
Mark J. Folsom.
John Good.
William Dallinger.
George H. Copeland.
Alfred F. Holt.
George T. Barrington.
Edward M. Williams.
Warren F. Spalding.

Superintendent of Burial Ground in Ward I.

Benjamin F. Wyeth.

Undertakers.

Benjamin F. Wyeth.
Roland Litchfield.
Samuel F. Hunt.
Thomas Devens.
John W. Coveney.
Judson Litchfield.
William N. Mullins.
James Kernan.
William Casey.
C. Henry Lockhart.
William A. Taylor.
Horace D. Litchfield.
James E. Rourke.
John J. Murphy.

Auctioneers.

Samuel F. Rugg.
Edward Burnham.
Enoch H. Wakefield.
Frederick A. Lull.
Ira Taylor.
Daniel A. Buckley.
Edmund E. Sanborn.
John R. Fairbairn.
Jeremiah W. Coveney.
John Lennon.
Watson G. Cutter.

Fence-Viewers.

George B. Lothrop.
Abel Stevens.
Francis H. Stickney.

Field Drivers.

James S. Alexander.
Benjamin F. Bridden.
Edward F. Belcher.
Elbridge S. Blen.
George T. Barrington.
Edward Brady.
Daniel Callahan.
Denis Corcoran.
Timothy Corcoran.
Michael J. Conry.
George S. Dudley.
Patrick Doyle.
Thomas F. Dynan.
Lawrence J. Ducey.
Rufus S. Downe.
William Evans, Jr.
Warren A. Eaton.
Joseph H. Furbush.

William Gallagher.
Robert T. Hixon.
Luther Hapgood.
Simon D. Hiscock.
Benjamin F. Higgins.
Moses W. Hooper.
Alonzo S. Harriman.
Thomas S. Hall.
Amos Jones.
Henry C. Jones.
James M. Keaney.
Thomas H. Lucy.
Cornelius A. Murphy.
James McChristal.
George A. Marston.
William H. McMenimen.
Hugh McNamee.
James E. Murray.
Matthew R. Moore.
Michael J. Nolan.
William Nickelson.
Charles W. Priest.
Charles L. Pike.
Bernard J. Roper.
Thomas F. Sullivan.
John E. Shaughnessy.
Andrew G. Smith.
Leonard Shackford.
David A. Stevens.
Frank W. Scobey.
John W. Skelley.
William Twist.
James W. Wright.
Orrin B. White.

John Wiley.

Measurers of Wood and Bark.

John R. Taylor.
William H. Hood.
Herbert T. Lawrence.
Thomas H. Matthews.
Benjamin J. Hoyt.
J. Henry Wyman.
Joshua S. Sanborn.
Horace L. Porter.

Nathan L. Allen.

Pound Keepers.

Elisha S. Woodard.
Thomas D. Cook.

William Twist.

Fish Officers.

Daniel A. Buckley.
Linn B. Porter.

James Cox.

Hay Weighers.

Timothy Sullivan.
William H. Dodge.
Nathan L. Allen.
Joshua S. Sanborn.

Coal Weighers.

James F. Jefferds.
Thomas H. Matthews.
John E. A. Mulliken.
Patrick Kelley.
Geo. C. Gardiner.
Walter F. Grieves.
Jones Valentine.
Alfred H. Wellington.
Joshua S. Sanborn.
Herbert T. Lawrence.
Horace L. Porter.
Silas E. Buck.

Weigher of Boilers and Heavy Machinery.

Joshua S. Sanborn.

Inspectors of Junk Shops.

Frederick W. Hagar.
Lothrop J. Cloyes.
John F. Murray.
Mark J. Folsom.
Frederick B. Pullen.
George H. Copeland.
William Evans, Jr.

Sealer of Weights and Measures.

Benjamin F. Nourse.

Deputy Sealer.

Conrad D. Kinnear.

Weighers.

Joseph W. Averill.
James H. Reardon.
Nathan H. Holbrook.
Henry Hooker.
Robert S. Paine.
Elisha S. Woodard.
George W. Wright.
Alvin M. Haines.
Isaac A. Chandler.
Henry James.
George W. Barnes.
John Reardon, Jr.
Joshua S. Sanborn.
Thomas Ralph.
Charles F. Hittinger.
Harry Hittinger.
Thomas H. Shea.
James W. Coleman.
John Guiney.

Inspector of Milk.

John H. Farrell.

Inspector of Vinegar.

John H. Farrell.

Surveyors of Mechanics' Work.

William S. Barbour.
Charles A. Mason.
John S. Pollard.
Arthur Hodges.

Measurers and Surveyors.

E. F. Young.
Henry L. Hale.

Inspector of Charcoal Baskets.

Benjamin F. Nourse.

Measurer of Grain.

Benjamin F. Nourse.

Ward Officers.

Ward I.

WARDEN.
Edmund Miles.

CLERK.
John W. Sanger.

INSPECTORS.
James A. Martin.
Samuel F. Rugg.
Lafayette G. Blair.

Ward II.

WARDEN.
Horace G. Kemp.

CLERK.
Frank W. Dallinger.

INSPECTORS.
Edward W. S. Jones.
Harrison G. Wells.
Elmer H. Bright.

Ward III.

WARDEN.

Daniel B. Shaughnessey.

CLERK.

Silas E. Buck.

INSPECTORS.

James W. Sweetser.

John J. Murphy.

Charles E. McCarthy.

Ward IV.

WARDEN.

Charles L. Russell.

CLERK.

Herbert A. Boynton.

INSPECTORS.

John Locke.

Elbridge G. Stevens.

William J. Mahady.

Ward V.

WARDEN.

Joseph Newman.

CLERK.

Frederick E. Whiting.

INSPECTORS.

Sylvanus G. Griffin.

Edgar H. Locke.

Walter Stimpson.

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